PROGRAMME

FOR THE

ELEMENTARY S

BULLETIN II

THE ENTERPRISE
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PROGRAMME OF STUDIES

FOR THE

ELEMENTARY SCHOOL

BULLETIN II

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THE ENTERPRISE
LANGUAGE
READING
ARITHMETIC
MUSIC

●

This Bulletin is authorized by the Department of Education and supersedes previous programmes.

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FOREWORD

In presenting these revisions of the elementary school programme to teachers and others interested the following observations appear to be in order.

1. Though contained in new publications and styled in somewhat new form the programme is not a new one in the same degree that the 1936 programme was in relation to its predecessor. Rather it is an attempt to present in clearer and more useful form the existing programme, being based on essentially the same fundamental principles. It is hoped that the material of the course, especially that relating to the enterprise instruction portion, can be more readily interpreted and followed by the busy teacher, by the teacher not too confident of his capacity to develop his own enterprise programme, and by the teacher handicapped by heavy enrolment and lack of facilities. In so providing it is hoped that it will in no way dampen the enthusiasm or curb the resourcefulness of those teachers who find themselves able to develop the initiative not only of themselves but of their pupils.

2. Bulletin II, of which this is the foreword, represents only one of several publications which will bear on the elementary programme. It contains the essence of the material to be presented to the children, and is to be followed by others which will deal with the educational principles upon which the programme is based and with teaching and classroom techniques.

3. The programme results from much observation and discussion. The views of superintendents, teachers and others have been sought and obtained. While these could not always be reconciled or incorporated, all have had their effect upon the nature of the programme as finally produced.

4. While continuous revision is the ideal of curriculum builders this is scarcely practical administratively. Nevertheless, we do not present this programme as the last word. Doubtless its use will reveal weaknesses in application. We shall be pleased to be advised of these whenever they become apparent so that we may modify and improve what is here presented.

5. Despite great expenditure of time and effort by many people some portions have required last minute rewritings and modifications. Should there appear any lack of uniformity of style this may be attributed not to lack of care but to the presence of the handiwork of more than one collaborator.

It is our hope that the programme will be an acceptable instrument in the hands of our teacher.

W. H. SWIFT,
Deputy Minister.

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FOUNDATIONS OF EDUCATION

Any statement of educational objectives, whether of a general nature or as specific goals applicable to a particular subject field, is useful only to the extent of its agreement with the teacher's professional thinking. Every teacher is urged, therefore, to devote some time to a consideration of his basic purposes in the classroom, and to compare them with those upon which this programme is built. For assistance in such comparison teachers are referred to Bulletin I which introduces three fundamental emphases:

1. What We Know About Social Needs and Social Structures.
2. What We Know About Child Growth.
3. What We Know About the Learning Process.

For the busy teacher the material of Bulletin I is summarized here. It is hoped that this review will stimulate rather than replace a reading of the more complete statement.

PART I

By way of introduction it is suggested that the practical classroom teacher, no matter how busy he may be, should pause now and then to consider the broader questions, "What is it all about?", "What am I here for?", "What am I really trying to do for these boys and girls?"

The answers lie in the help he can give to promote child growth—growth that is physically, mentally, emotionally, socially and spiritually sound. In order to give the maximum help he must know as much as possible about how young people grow and about the environment in which they grow.

PART II

This first section deals with the environment in which our children develop. It points out that the first-rate practical teacher must not only be acquainted with the homes from which his pupils come but that he should also have some knowledge of how his city or town or community operates.

The content is organized around the answers to three questions:

(a) **What are the major trends in our present culture?**

1. Although the general pattern in the business world is based on what is called "free enterprise", there are the modifying influences of "big business", co-operative movements, and political groups that advocate a "planned economy".

2. The present organization of society over-emphasizes business activities and under-emphasizes cultural activities.

3. Competition remains the basis upon which most individuals seek success.

4. A few individuals, through large business or financial corporations, exercise tremendous power.

5. People are able to move about from place to place more easily than ever before and are able to move up the "social ladder" more easily.

6. City populations are increasing and rural populations decreasing.

7. Young men and women—between 25 and 40—are given preference in most jobs.

8. Most people seem to value money more than anything else.

9. There has been a great increase in the controls exercised by governments and a great increase in the number of civil servants.

(b) **What are the characteristics of a democratic society?**

1. It has a high respect for the worth of the individual.
2. It believes that normal men and women are capable of governing themselves.
3. It relies on an appeal to reason.
4. It expects every citizen to perform his duties of citizenship.
5. It expects every citizen to place the welfare of his community, his province, his country and the world, ahead of his personal gain.
6. It defends the civil liberties of men—freedom of speech, freedom of religion, freedom of a job, freedom to vote effectively, freedom to hold property, impartial justice and trial by jury, free access to information.
7. It believes that it can solve its problems and that in the democratic form of society lies the best hope of mankind.

(c) **What are the traditional values of democratic society?**

It is the duty of the practical classroom teacher to help the students develop strong characters. They must acquire strong and abiding loyalties to those values to which the democratic society subscribes. Some of these are:

1. Co-operation and social concern.
2. Honesty and integrity.
3. Accurate and complete information.
4. Harmonious home and family relationships.
5. Industriousness.
6. Appreciation of beauty.
7. Spirituality.

PART III

This section deals with the actual processes of child growth. To know the usual pattern of child growth makes better teaching, and to see the individual pattern of child growth makes happier teaching.

Certain general principles apply to all features of growth:

(1) The child grows as a unit, with each part of life, the physical, the mental, emotional, the social and the spiritual, affecting every other part in some way.

(2) Almost every one is "out of the ordinary" in some respect. Physical differences can be found and treated much more easily than personality differences.

(3) Nobody grows in a dull uniform fashion. We all have our "plateaus" and our "spurts".

A great deal of work is now being done in child research by experts. Usually the work undertaken involves observation of a large group of children by an adequate staff of well-trained persons and continues for a good many years. These long-term extensive co-operative investigations are termed "longitudinal studies". One of the best examples is now going on at the Institute of Child Welfare, University of California. There experts test 4500 children at one-to-six month intervals with physical measurements, X-rays, and examinations of every sort. Similar types of work are going on at a number of other universities and clinics.

Physical Growth

One of the best reports on physical growth is found in the book by Dr. Helen Pryor, **As the Child Grows.** The major conclusions summarized most briefly indicate that:

(a) Physical growth is distinctly a **personal** individual affair.

(b) Physical condition has a most important, mutual relationship with personality development.

(c) The usual height-weight charts may easily set a distorted standard for individual children.

Mental Growth

The issue of heredity versus environment in deciding mental ability has never been settled. The best advice to teachers is to pay most attention to environment since it is too late to change Johnny's parents anyhow.

The literature on the topic would seem to justify these generalizations:

(1) Individual graphs of mental development tend to show variations and fluctuations. Clever children tend to show the most deviation.

(2) The age of full mental growth cannot be accurately set, and likely varies with different people. Experts estimate the age all the way from sixteen to twenty-two.

(3) Girls are no brighter than boys, and vice versa.

(4) Even with our best measuring devices, the prediction of mental growth is always a probability rather than a certainty.

Intelligence testing has become almost a phobia in some classrooms. Teachers should be wary in interpreting results of mental tests. Certain warnings are necessary.

(1) Even the best pencil-and-paper tests show considerable unreliability—up to 5 points either way. Many tests show even 10-point variations in either direction.

(2) Scores from 90 to 110 are considered normal.

(3) Even pupils below 90 can learn readily in many ways and can benefit greatly from good instruction.

Exceptional Children

People differ in every way and in all degrees. When differences are so noticeable as to be conspicuous special care must be exercised to guarantee every chance of happiness for the child concerned. No teacher worthy of the name will allow these differences to be the basis for ridicule and teasing amongst his classes. The establishment of good mental hygiene in the classroom is a direct responsibility of the teacher.

Personality Growth

Good personality probably means making the best possible choice amongst all the inward desires and forces that compete for our attention. Every person must establish a harmony or at least a peaceful truce between the various "drives" or "needs" that he naturally experiences.

These needs can be classified into three major groups:

(1) Physical needs—such as food, sleep, rest, and glandular

balance. The fundamental instincts of protection, self-preservation and reproduction are generally included in this group.

(2) Social needs—Included are two essentials (a) some personal affection and (b) some group recognition. Another way to say this is that we must get some attention because of (a) who we are and (b) what we are.

(3) Self or Ego needs—This simply means that we must be reasonable happy with ourselves. To be so we must have self-respect, some self-satisfaction, some will power. It is generally agreed that the existence of some definite pervading purpose in life offers the surest guarantee of personal happiness. Only through allegiance to worthwhile goals can adequate personality be developed.

It should be added that in satisfying these needs each person must maintain full regard for other people, their feelings, their rights and their desires. Otherwise he inevitably loses the spirit and soul of what he seeks most.

PART IV

This deals with the actual inward process of learning. The exact nature of this intellectual phenomenon is still uncertain and is the subject of much controversy. Two theories are most widely accepted:

(1) The Bond theory, sometimes called the S-R theory or the Connectionist theory, is quite mechanical in its explanation. It relies upon stimulations from the sense organs, transferring to the brain, to there make contact with nerves creating certain responses. Through practice the "pathway" or connection becomes stronger and stronger. In consequence it emphasizes drill and testing, and the breaking down of subject matter into elements or parts.

The "Laws of Learning" have been devised to accompany and explain it.

(2) The Gestalt theory relies on the power of insight or reasoned relationships. It insists upon some type of pattern in all learning, and that what makes most sense is most easily learned. It emphasizes motivation and pupil interest. The Gestalt teacher always seeks to teach by whole rather than by part and to present clear over-all mental pictures.

The practical classroom teacher may not subscribe exclusively to either theory but seeks whatever seems most valuable in each. Familiarity with the areas of common agreement should foster the improvement of learning situations:

(1) The entire learning process is highly complex, and involves the arrangement of material to be learned into some pattern or design that is meaningful to the learner.

(2) Learning must be explained in terms of relationship between events (including physical and mental activities) rather than in terms of independent, isolated phenomena.

(3) Motivation, or the desire to learn, is essential for every successful learning situation.

(4) Good motivation includes setting up some goal, and learning consists of regulating and directing one's behaviour in a manner that will enable one to achieve that goal.

(5) Most learning includes some intermediate activity, intellectual or physical or both, between the initiation of a purpose and the acquisition of the goal. This intermediate action might better be called "approximation and correction" rather than "trial-and-error".

(6) Any learned response may be modified according to the consequences that follow it.

(7) Learning is essentially complete when fundamental relationships are clearly perceived and fundamental principles involved are mastered.

(8) Transfer of training is roughly proportional to the degree in which situations are similar in structure and in meaning.

(9) The ability to recognize differences (discrimination) is as important in the learning process as the ability to recognize similarities (generalization).

(10) The learning process is a function of "the whole child", and, as such, is influenced by physical, social, and emotional as well as intellectual factors.

OBJECTIVES OF EDUCATION

The ultimate goal of education is the happiness of the **individual.** Accordingly, the teacher's purpose is to assist each child in the class to unfold as fully as possible his unique potentialities; he should direct his attention primarily to the welfare of each boy and each girl, recognizing that if every child as an individual in his own right is given the opportunity for proper physical, mental, emotional, social and spiritual growth, he will cheerfully and understandingly fulfil his responsibilities to his fellows.

Just as desirable goals are defined in terms of personal growth so the progress toward those goals must be measured in terms of personal action. The aim of the school is not so much to teach pupils all the facts they have not yet mastered as to hasten all the desirable behaviours they have not yet attained. It is acknowledged that our educational system is effective only to the degree that pupils improve in their thoughts and actions as a result of school attendance. Fortunately the task of the elementary teacher in observing and evaluating outcomes through actual child behaviour is lightened by the fact that young children tend to translate their inner thoughts readily and directly into spoken words and overt activity.

What then, are the desirable growths we seek to foster most in the children of Alberta schools? They are classified in four categories:

I. Attitudes of:
   1. **Self-respect**—marked by control, discipline and direction through one's own initiative.
   2. **Creativeness**—marked by personal expression that becomes unique and revealing.
   3. **Scientific attitude**—marked by the power to delimit problems, search for data, weigh evidence, form conclusions, and above all to evaluate one's own judgment in the light of subsequent events.
   4. **Co-operation**—marked by consideration for the rights and feelings of others and a willingness to share cheerfully.
   5. **Responsibility**—marked by readiness to carry tasks to completion, to behave honestly with one's self and with others, and to accept the consequences of one's own actions.
   6. **Social concern**—marked by earnest effort to implement whatever desirable ends the group may seek.
   7. **Reverence**—marked by a conviction of Deity, and a regard for His supreme handiwork, mankind.

II. Appreciations of:
   1. The dignity, worth and possibilities of the individual, reflected in a high standard of conduct for oneself, and, a high regard for other people and their values and beliefs.
   2. The dignity, value and achievements of work in science, in religion, in philosophy, in art, in literature, in craftsmanship, in honest labour everywhere.
   3. The manifestations and beauties of Nature—both in the natural state and as revealed through science.
   4. The increased values derived through associations with

others—in recreation, in conversation and other expression, in common cultural activity, with a special appreciation of the family relationship and its stabilizing influence.

III. Understandings—which go beyond facts to see the significance of:

1. The social life of expanding communities.
2. The interdependence of all forms of life.
3. The effects of the environment on human life.
4. Man's increasing control over nature.
5. Man's increasing knowledge of social development and social control.
6. The contributions of the past to the present.
7. Democracy as a way of life and a means of self-government.
8. Responsibilities inherent in a democratic way of life.

IV. Abilities and Skills to:

1. Read for one's own pleasure and to obtain needed information.
2. Communicate with others orally and in writing.
3. Listen.
4. Find, organize and use information.
5. Use numbers and mathematical processes effectively.
6. Solve problems of a social and scientific nature.
7. Express oneself through artistic media.
8. Maintain health.
9. Function as a wise purchaser and consumer.
10. Maintain concentrated efforts in accordance with native ability and natural maturation.

ENTERPRISE ACTIVITIES

Point of View

Increasing the effectiveness of each individual in furthering his own growth and in participating in social and material improvement is a fundamental concern of Canadian education. Formal school is our organized effort to promote the necessary growths and adjustments with maximum achievement and minimum friction. These three areas of living, the personal, the social, and the material, are so essential and inextricable that no school system can overlook or depreciate its responsibility to provide guidance in every one of them. **This course of study emphasizes socialized activities in the belief that through social activities people can determine a proper control of the physical world and can express their finest manifestation of personal accomplishment.**

Everything children learn in our classrooms is affected and modified by the social studies milieu. Our formal science courses are largely studies of the modifications man has devised for the raw materials he originally found. This phenomenon of nature we observe and interpret as it relates to our social situation. All we learn about plant life, animal life, soils, disease, energy, measurement, and machines is significant only as it relates to the culture and civilization of today. As science has become a corollary of social progress so have other school subjects. Everything included in a modern curriculum must be justified in terms of its value to man, individually or collectively. The school teaches something of numbers to equip the child adequately to analyze the mathematical relationships thrust upon him in the form of technical and commercial interests. The child learns to read in order that he may share the thoughts and experiences of other people. He learns to spell to write and to speak according to pre-determined standards in order that he may more readily communicate with others and through that communication achieve his own pinnacle of personal growth. Art becomes a medium of social expression; music is a reflection of our social values, virtues, and vices. Health, even personal health, is an acknowledged community concern. All vocational education is governed by social needs, motives and standards. Leisure hours and recreational pursuits have been socialized to the point that the man who can enjoyably entertain himself for a single evening seems a rarity. The summation of all this is simply that every phase of our curriculum concerns people, their accomplishments, their organizations, their customs, their aims, and their dreams.

Social motives and standards originate as individual motives and standards. The value pattern of the community is an accumulation of the common elements of the value pattern of its citizens. Good citizenship involves a translation of proper human values into social action, and accepted in this sense, becomes a basic goal for all education. If we can accept this goal as of primary consequence, then we can accept social studies as the foundation upon which a school programme can justifiably be constructed.

One of man's most peculiar characteristics is his creative ability. Through the centuries of practice given to this unique gift our civilization has been created. Mankind has taken most literally the instruction "to subdue the earth and have dominion over . . . every living thing." The mysteries of nature have been most zealously studied, and the success in their solution has been astounding, even though incomplete. Man's latest conquest, atomic power, is bulging with possibilities for

further technological advances. Apart from his physical and technical discoveries, man has created a vast network of social institutions, mores and social inventions—representative government, codified law, international finance, conventional etiquette, to mention but a few. Some sociologists say that the basic drive behind all this creative activity has been the search for self-preservation and security—that in a world where only death seems certain, man has sought to remove himself as far as possible from the insecurities that threaten his existence. Unfortunately he appears to have overlooked one fact: the most potent enemy in a hostile world is other men. In the struggle for security, nations have set up commercial monopolies and social barriers that have alienated without regard all the human sympathies that should bind men together. In consequence, the effort for the greatest security has created the deadliest enmity. Man, the creator, has become the destroyer. Within the very power of creation lies the force which, like the atomic chain reaction that destroys matter, threatens to disintegrate functional society.

What then is the hope of breaking this vicious circle? It lies perhaps in a new concept of what constitutes security—not security for self, but security for all men. That concept can develop only by broadening the basic relationship of good will amongst all men. This development in turn demands a deliberate and primary effort of the widest possible participation. It has been well said that "we have reached the stage where it is obvious that until we solve satisfactorily the problem of human relationships in this now small world all other issues are of secondary importance."(1) Every social force to be of consequence must touch the individuals at the level at which they feel, think and act. It follows that whatever remedial forces we devise for the improvement of human relationships must be so timed and fashioned as to make lasting impressions. Schools and teachers cannot escape sharing the responsibility for the implementation of a finer pattern of human relationships. The task is not to devise the basic tenets of that pattern. Those have been set long ago; they have simply been neglected or disregarded. Years ago a great Teacher summarized them: "Whatsoever ye would that men should do to you, do ye even so unto them," and "Thou shalt love thy neighbour as thyself." A less direct way of saying the same thing is to state that every man must first develop, and then act in accordance with, a socialized personal conscience.

If a socialized personal conscience is genuine and universal its immediate effect will be an attempt to implement the impulses it originates. The successive steps toward any effective action will include:

1. The establishment of relevant understandings; and

2. The initiation of skills and habits of desirable behaviour.

Here again the school has a serious responsibility. Understandings are commonly confused with facts. Actually they are concerned with facts, but they go beyond to include the significance of facts to visualize the relationships that exist between any stated problem and all the known facts relevant thereto. Accumulation of information alone is not a valid goal for modern schools. Such activity becomes educative only when the facts are accumulated for a purpose and when they can be used to see relationships, interpret experiences and solve problems that concern the learner.

(1) Hon. E. C. Manning in an address before Canadian Educational Association, Edmonton, August 31st, 1946.

Skills and habits are frequently limited to academic tools—reading, penmanship, computation, etc.—and items of personal behaviour, neatness, industry and punctuality. These are valid and important. Equally important, but sometimes overlooked are the study skills—using a book efficiently, summarizing and reporting, reading maps and graphs—and the social habits—co-operation, group activity, careful listening. A third type of skill is missed so completely as to be a rarity in elementary schools. It has to do with the processes of scientific problem solving. Its eventual importance cannot be neglected on the grounds that it is difficult both to teach and to test. It is at once the most intricate and the most necessary skill for democratic citizenship.

Educational progress during the past forty years has been inextricably linked with two changes. The first has been the realization that learning goes beyond the purely intellectual process to involve all phases of human living. The second has been the school's acceptance of a share in the responsibility for training in areas beyond academic skills and information. The consequent re-adjustment in educational practice has been the introduction of the activity movement in school curricula.

Alberta schools have accepted this broadened viewpoint with the implications it carries for the subject matter and the methodology of our elementary school programme. For some years our teacher-training and curriculum services have extended their efforts to provide, through teacher graduates and courses of study, school experiences that can meet the criteria of effective understanding and participation in democratic social living. The activity programme in our schools has taken the unique terminology of "enterprise education". It is based essentially upon the unit organization of subject matter and upon those teacher-pupil co-operative techniques that have proven sound in theory and in practice. This revision maintains the activity programme as a desirable educative experience for our pupils. Enterprise education is considered effective because it:

1. Delineates some significant social theme or situation.
2. Touches upon and promotes the natural interests of children.
3. Provides varied opportunities for the satisfaction of basic personality needs, intellectual, aesthetic, spiritual and social.
4. Offers individual and group practice and teacher guidance in problem solving and in learning situations with all related skills that go to make such situations effective.
5. Contributes to the integration of a pattern of values that is harmonious with democratic tradition and with Christian ethics.

Subject Matter in Enterprise Work

One of the most serious charges against the activity movement in education is that it lacks any guarantee of adequate coverage of what the traditional school considered essential subject matter. Refuge may be taken in the argument that "essential subject matter" as applied to functional day-to-day living is a myth, and that no arbitrary selection of facts can be justified as necessary and basic to wholesome child growth. Valid as this argument may be, we cannot afford to overlook certain considerations:

1. Sound citizenship can flourish only when an appreciation of

our society, our country and related problems has been established. Such appreciation demands definite understandings which in turn derive from an accurate and complete evaluation of facts.

2. Wholesome personal growth is largely a process of integration, and in the intellectual field this denotes some insight into causal relationships which arise from logical arrangements of knowledge.
3. The traditional function of the school has been to impart knowledge, and society still expects scholars to "know something" as a direct result of school attendance.

While modern education discounts the claims of any particular body of subject matter on grounds of mental discipline, traditional priority or inherent sanctity, it must also reject the position that in relation to child growth factual assimilation and subject matter exploration can be given casual treatment or even cursory dismissal. The issue as to the real **purpose** of factual knowledge in education cannot justifiably lead to the conclusion that subject matter is of no lasting concern nor consequence. Social competence rather than encyclopedic learning has become the goal of education, and within that concept facts still play an indispensible, if subordinate, part. The accumulation of facts for mental exercise has little educative value; the accumulation of facts for significant understanding is essential in every field. **There is no condonation in this programme for inaccurate and incomplete coverage of the basic knowledge concerning topics on which Enterprises have been attempted.**

Some persons would claim that we may deal in logically arranged subject matter or we may deal in items of child interest, but we cannot do both. That claim has been refuted in hundreds of classrooms in Alberta and elsewhere where the activity programme has been implemented with skill and enthusiasm. The ideal situation will arouse and develop child interests which, in their satisfaction, will demand information logically arranged and presented.

Organization

One distinguishing feature of good Enterprise teaching is planning. The purpose of planning should be to guide and unify pupil activities at every stage of the work. Emphasis should perhaps be placed upon the idea of "planning" procedure as opposed to "planned" procedure. Flexibility must be maintained at all costs if activities are to retain freshness and spontaneity and if pupils are to enjoy an appreciable degree of self-direction and self-determination. Leadership must, however, in interest of time economy and learning efficiency, express itself in some early tentative organization and forethought. This applies to classroom experiences and activities, to the broad blocks of Enterprise outlines, and to the over-all picture of the entire elementary school.

Our most successful Enterprise teachers have developed some workable patterns of the general areas which constitute a fairly complete programme for the grade levels at which they work. Their success depends upon more than an isolated year's work. It extends back to utilize past experiences to present advantage, and it lays an adequate foundation for future studies. Sound principles of child psychology demand proper articulation of learning from year to year. Such articulation can be accomplished only if the teachers over

successive years adhere to a harmonious pattern of experiences. The obstacles of the past to year-to-year continuity, particularly in our rural schools, have been distressingly destructive to much good work done by individual teachers. **This programme accordingly undertakes to present a specific pattern of Enterprise experiences for the guidance of Alberta teachers.**

It is expected that, for the majority of elementary teachers, the directions of this programme shall be considered as fairly definitive. It would, however, be entirely contrary to the spirit of this programme to curtail or impede in any way the good Enterprise work that is already being done by certain experienced, fully-qualified teachers in our province. Any teacher whose experiences in handling Enterprise work has been highly encouraging should feel completely free to deviate in part or in whole from this programme, or to modify it in whatever respects may seem advisable in the light of past experience and local conditions. Any school where the staff has worked as a unit in attacking problems of curriculum adjustment in terms of local needs and resources should be encouraged to continue all feasible experimentation in the elementary grades. It should, however, be remembered that major modifications of the course should be attempted only after some advisement and with the permission of the superintendent of schools.

The following features in this basic Enterprise pattern should be carefully observed:

1. **A major emphasis on Social Studies is maintained throughout.** The point of view taken as justification for such emphasis has already been reviewed. Except for this added tone to the Social Studies the placement of subject matter fields within the Enterprise areas has had little alteration.

2. **Health and Science remain merged with the Social Studies to prove basic content for the activity programme.** These subjects are to be treated wholly within the Enterprise or, in some instances, by special consideration as Parallel Activities (see page 88). No place on the timetable should be provided for them other than the block schedule for Enterprise. Moreover, there has been included in this programme skeletal reviews of various problems and concepts in Health and Science. **These reviews are intended for teacher guidance only.** There is no intimation that the teacher should organize and teach this material as separate subject fields. Nor is it suggested that **all** concepts mentioned in the respective outlines be considered essential information. No claim can be made for infalibility in grade placement of items.

Past experience reveals an alarming neglect of Health and Science in elementary schools. With the emphasis on Social Studies as outlined in this bulletin such disregard might possibly continue. These outlines are accordingly intended to guide teachers in their selection of content and concept from Health and Science areas. **It is repeated that Health and Science are to remain as integrated phases of the Enterprise activity. Items difficult to integrate with the units of work may be handled as Parallel Activities.**

3. Language, Reading, Literature, Music, Art, Arithmetic, Penmanship and Physical Education are to be regarded as fields for correlation, and are to be treated in as close a conjunction to the Enterprise **as may be feasible.** Music and Art will normally border on complete integration, while Arithmetic, in turn, will normally prove much more difficult to treat adequately in integrated fashion. Teachers

are encouraged to search diligently for suitable ways and means of motivating and organizing all school studies around the topics of current child interest represented by the Enterprise.

4. **The pattern for Enterprise work follows a Scope and Sequence organization, which is most widely accepted in activity curricula. This re-alignment of material to fit the Scope and Sequence organization represents the most significant change effected by this programme and should consequently be studied carefully by all teachers.**

The Scope and Sequence organization maintains the viewpoint of the primacy of social living. The student develops, not in academic isolation, but in a very real and very complex environment, the most important component of which is other people. The problems of a happy personal adjustment into this environment, and particularly the problem of favourable human relationships, are crucial concerns of the school. This approach designates firsthand experience and personal investigation of vital areas of functional social living as the most fruitful avenue for optimum individual growth. Certain social scenes, or groups of associated people are accordingly selected and are studied by the children in some detail to learn how these people have met or are meeting the problems presented by all the environmental factors around them. Through these experiences the pupils mature their own potential capacities for successful participation in the social action, either present or future, in which they find themselves.

The basic process of social living or essential problems of social significance that are operative in every societal organization we may call the legitimate **Scope** of the Enterprise. The **Sequence** is the term applied to the succession of social situations selected for further investigations and study. In other words, **the Scope includes the problems that should be of concern in every Enterprise,** while the **Sequence sets forth a suggestive series of** social situations for study, logical from the standpoint of expanding concepts, and child maturation, and attractive from the standpoint of normal child interest.

The net result of such an approach is that the teacher must guide the selection of topics to fit generally into the areas outlined under **Sequence,** while the treatment given to the selected topics should correspond generally to the issues raised by the problems enumerated under **Scope.** Experienced teachers will recognize at once a guiding policy in such organization. The object is to bring children into intimate and understanding contact with the problem of supplying basic human needs **in a very definite social situation.**

In the past, Enterprises have commonly been worked out around a theme, such as "Food" for example, which in its development brought in information about a great many people and places, including possibly, among others, the ancient Egyptians, medieval townsmen, Peruvian Incas and modern Laplanders. Of necessity the treatment given to background factors had to be limited to the immediate facts, the habits and sources of "Food" in each setting. The use of such themes would almost presuppose some rather definite understanding by the child of the general picture of social development through the ages. It is open to question whether the children in our elementary schools have sufficient understanding of history and geography of the world to appreciate an investigation that embraces such widely separated situations as in the examples mentioned above.

Furthermore social communities have differences and distinctive qualities that must be sensed before firm sympathies for their problems can be established. An appreciation of these community distinctions grows from an understanding of the things that influence people in their routine life—the soil they till, the crops they harvest, the homes they build, the goods they sell, the games they play, their art, religion, literature and government. The problems of their daily life do not stand in segregation to be scanned as isolated items. They operate in unison to create community needs, community action, and community spirit. Food problems bear a relationship to Health, Education is tied to Government and frequently to Religion, Shelter and Clothing are phases of the same basic problem of protection from adverse elements. The establishment of these understandings and appreciations requires an approach tailored to such purposes. A unit of work developed on a single theme such as "Food" tends to encourage rather cursory examinations of the social structure as the child gleans an interesting, but nevertheless miscellaneous, collection of information about feeding habits the world over. There is a definite place in the plan of social education for the study and pursuit of themes that run like threads through all social fabrics. Surely, however, that place comes **after** the student has realized the nature and design of the overall pattern that the loom of society weaves. A primary responsibility of the activity programme is that, through the **where,** the **when,** and the **how** of social living, the child shall learn something of **the why** of man's social behaviour.

A preferable approach to such understanding is offered by a thorough study of selected social communities. The "themes" that have characterized much past Enterprise work are now replaced by a sequence of social situations. One such situation will be the local community. The study should not focus on isolated considerations such as "Transportation", "Shelter", or "Government", but should include a review of the complete gamut of problems attendant upon progressive social living. Instead of "Food" providing the theme for an Enterprise that moves through medieval life, modern Laplanders, and ancient Incas, the approach is reversed. Medieval life, modern Laplanders or ancient Incas may be Enterprise topics for studies that touch on all problems, food, clothing, government, health, etc., as they existed in that day and place. The theme topics remain, but as areas of the Scope to be applied to every Enterprise.

The Sequence of the present course accordingly sets up for Grades III-VI inclusive a series of four sections per grade, each involving some social problem or statement of a generalized nature. Within each section in turn is a series of specific social situations. **These specific social situations are intended to be suggestive topics for Enterprises or units of work. The final choice is left to the teacher and the class.** From the selected study it is expected that the class will grow in their appreciation of modern society, the recurrent problems of social living, and the most effective solutions that men have devised. Many factors will of course enter into the final choice of topic. Local conditions, pupil interests, pupil needs, reading maturation, library facilities, and other materials as well as teacher preference will be of some concern. **Teachers are free to use material outlined for other grades provided they have valid reasons and the consent of their superintendent.**

Cycling

Any sequence of Enterprise topics selected solely for the graded

schools of urban districts would be quite unsuited for the rural schools in Alberta. Similarly, planning solely from the viewpoint of the rural school would certainly result in a programme of some inconvenience to city teachers. **The existing differences in Alberta schools present a curriculum problem that can be solved satisfactorily only by the diligent efforts of teachers, principals and superintendents. This programme must be interpreted in view of local conditions and circumstances.** The optimum arrangement requires that understandings and experiences of previous years form a substantial foundation. The grouping of classes necessitated by conditions in rural schools means that each Enterprise class in such a school will enroll pupils differing, not only in individual inclinations and general maturations, but in skill accomplishments and general classroom experiences and learnings. Enterprises for such classes can assume very little uniformity of background and viewpoint. This provides a direct multiplication in the nature and difficulty of problems of methodology confronting the teacher. It also has a definite effect on curriculum planning and subject matter selection. Topics chosen must be purposeful to varying age levels, meaningful to varying background patterns, and appealing to individual interests. This programme attempts to reach a compromise with respect to the differing needs of rural and urban schools. It is hoped that sufficient flexibility has been retained to allow teachers and classes sufficient latitude in choice of materials.

Past practice in Alberta has been to group pupils in ungraded schools according to the division in which they are enrolled. Thus in usual situations pupils from three grade levels are engaged in one Enterprise. Experience has proven that frequently such grouping represents the strained maximum-ability range for ordinary activity work. Increasing centralization of school service has tended to decrease the necessity in many schools for such broad grouping techniques. In those schools where feasible, a two-grade grouping will result in increased pupil homogeneity of natural interests, skill attainments and background experiences. Closer grouping will also reduce the strain on teaching techniques and will simplify the selection of Enterprise topics suitable for the needs and interests of the learners. A place has accordingly been provided for two-grade grouping for Enterprise work. It is intended that it shall be used in schools where grade loads are relatively light but where a room per grade cannot yet be provided.

Accordingly there will be three possible cycling arrangements:

1. A one-year sequence, each grade following serially, for completely graded schools.
2. A two-year cycle for schools where grade loads have been partially reduced.
3. A three-year cycle for schools where grade loads are necessarily heavy.

The two-year cycle is to be given preference over the three-year cycle whenever feasible. Smaller town schools, consolidated schools and smaller rural schools are encouraged to experiment with the shorter cycle. Teachers, principals, and superintendents in consultation should decide which arrangement will prove most beneficial for their students.

After the decision respecting the cycle has been reached, teachers will use their best judgment in the selection of sections for

study. As has been previously noted the outlines for Grades III, IV, V and VI have been divided into four sections with some special emphasis developed in each. Teachers are requested to be sure that **at least** one major Enterprise from each section is developed during the year. However, the teacher need not feel compelled to handle the sections in the order presented in Chart II, nor need he be confined to the topics suggested for each section for the various grades. Again it is repeated that **the listed topics are suggestive only.** The teacher and class are free to add other suitable and similar topics to each section, and may, if they wish, select topics suggested for corresponding sections of other grades. If, for example, an Enterprise class enrolls pupils in Grades III and IV they may wish to deal with materials listed under Sections 1 and 2 for Grade III, then switch to Sections 3 and 4 for Grade IV. While it is expected that teachers in graded schools will generally select suitable topics within the sections listed for their respective grades, there certainly is no Departmental mandate to this effect. Teachers with multiple-grade Enterprise groups should feel free to make deviations from any particular grade outline. This freedom of choice, however, implies two responsibilities:

1. The interests, needs, and background of the class should be the controlling factors, and
2. **A complete and accurate record of the topic chosen and the work done should be available for the use of the successive teachers to whom the class may be entrusted.**

ENTERPRISE RECORDS

Recording the topic, plans, accomplishments and details of activities is an essential phase of successful Enterprise teaching. The values of adequate records to pupils, teacher and superintendent are many. Meaningful participation, proper instruction and helpful supervision are all fostered by careful planning, and like any other function of teaching, planning is effective only when properly done. Planning cannot be considered to be complete without some type of written record. The benefits of good Enterprise records are not limited to the improvement of the immediate situation alone. One of the most distressing problems within the activity curriculum has been a lack of continuity and coherence in experiences over the years of the elementary school. Adequate records seem to offer the only feasible remedy for this serious drawback. Every teacher should learn as much as possible about previous activities of her class and should appreciate the history of personal growth in each pupil. Much of this information can be had from careful observations and relevant notes from previous years. Consequently no Enterprise can be regarded as satisfactorily finished unless some written record for future reference has been compiled. A good portion of the record may be compiled by the students themselves under the guidance of the teacher. Failure to make and preserve acceptable Enterprise records must be considered a serious dereliction of teacher responsibility.

The form used for Enterprise records may, for divisional schools at least, be considered a legitimate responsibility of the superintendent of the division. Nearly every division has devised suitable forms for this purpose, and the completion of such materials by the teachers should never be neglected. The Department of Education expects to supply, at nominal cost, one type of Enterprise record form for any districts and divisions that care to use it. Teachers in divisional schools should order such forms through their divisional office.

SCOPE

Wherever human beings have lived, regardless of time or place, certain basic human needs have existed. The effort to fulfil these wants has been the most vital cohesive factor in group living. As the group has increased in size, the problems and the needs have increased in number and intensity. The nature of the solutions that evolved determined the nature of the society that developed. The continued existence of the social group has depended upon the effectiveness of these answers to basic needs. The Scope section of this programme attempts to define these basic universal functions of social living in terms that are applicable to our society in general and that can be made intelligible to children.

Surprising agreement can be found in educational literature as to what ideas should be included in the Scope. These ideas are generally designated as "basic human needs", or "essential functions of social living" or as some similar social reference. Research by social scientists has established certain groundwork which we may consider to be the common denominator for all social organization. The proper Scope of an Enterprise based on a core of Social Studies will then cover the various phases of social living that have been found common to all societies.

Though general concurrence can be found for the problems to be included in the Scope, wide variety exists as to how such problems should be worded and expressed. The Alberta programme centres around a statement of ten major community activities:

(1) Getting and Preparing Food.
(2) Providing Shelter.
(3) Providing Clothing.
(4) Transporting and Communicating.
(5) Guarding Health, Safety, and Welfare.
(6) Governing and Protecting.
(7) Observing and Conserving Nature.
(8) Educating for Adult Duties and Jobs.
(9) Enjoying Recreation, Play and Leisure.
(10) Expressing Ideals Through Religion and Art.

Teachers will note a close similarity between these basic social problems and the "Themes of Social Living" of the previous course. Several differences at once suggest themselves.

(1) Each item is expressed, not as a theme or topic, but as a problem requiring some activity for its solution. Thus the theme "Food" has been changed to the related problem of "Getting and Preparing Food". Each theme has been converted to a corresponding problem.

(2) The theme "Work" has been omitted completely, on the assumption that the activities involved in the solution of these problems covers the major portion of what was included in the "work" section.

(3) The concepts concerned with Health and Welfare have been given stronger emphasis by removal from their former listing with "Government and Protection" in favour of a direct approach to the problem of "Guarding Health, Welfare, and Safety".

(4) An addition to the list of problems has been made in "Observing and Conserving Nature". It is hoped that concepts related to Nature Study and Science can be more adequately treated by focussing more direct attention on the problems of the immediate natural environment.

These differences so far noted are relatively minor. The major change designed for the previous "Themes of Social Living" has to do with their use in the selection and planning of Enterprises. Past practice has been to make frequent use of one "theme" as the topic for an Enterprise. Certain "themes" lent themselves conveniently to this treatment while others were sadly neglected. Thus we have repeatedly organized "Food", "Clothing", "Transportation" and "Shelter" topics into Enterprises while the concepts relating to "Government", "Education", "Expression", and "Recreation" have had relatively no attention. This lop-sidedness can scarcely be defended. **The Scope problems accordingly are not intended to be Enterprise topics in themselves.** The basic purpose in listing and discussing them is to offer teacher guidance **for every** Enterprise. **Enterprise topics are to be chosen from the Sequence pattern, not from the Scope problems.** These topics will as a rule be so selected as to represent some social organization, scene, or situation. As a rule **all ten** Scope problems are to be kept in mind when selecting relevant areas for investigation and study since all ten will apply in some respect to any social group that may be selected for close scrutiny. Certain exceptions to this procedure may, of course, be necessary but these variations should be for specific educative purposes.

Teachers should not feel obliged to attempt to devote equal time and emphasis to each Scope problem in each Enterprise. Some topics will naturally introduce special concern for specific problems. An Enterprise on "Living on Ships" will normally emphasize the problems of "Transporting", "Guarding Health", and "Getting Food" while the problems of "Educating" and "Providing Clothing" will be of relatively less consequence. Teachers are, however, reminded that over the period of a full school year some appreciation of each problem should be developed. Admittedly, certain phases such as religion, art, and government are less readily grasped by elementary school pupils than are the more tangible matters relating to the physical necessities of life. Unfortunately, too, the reference material on many of the more intangible problems are scarce and frequently too difficult in vocabulary. But no one can genuinely doubt the vitality and dynamics every society draws from its cultural, religious and political life, and some intimation of these can be acceptably presented to every grade level of school organization.

This programme makes no mandate that the problems of the Scope be maintained and treated individually. Experienced teachers will see ready correlations and combinations. Any re-arrangement that preserves the spirit of social problems of a universal nature and maintains a fairly complete coverage of such problems should be acceptable. Some teachers may feel that the ten problems are a bit ponderous and complicated for easy application. An alternative arrangement is suggested:

A. **Earning a Living:**

This obviously covers several of our ten Scope problems—
(1) Getting and Preparing Food.

THE PROBLEMS OF THE SCOPE APPLY TO EVERY ENTERPRISE

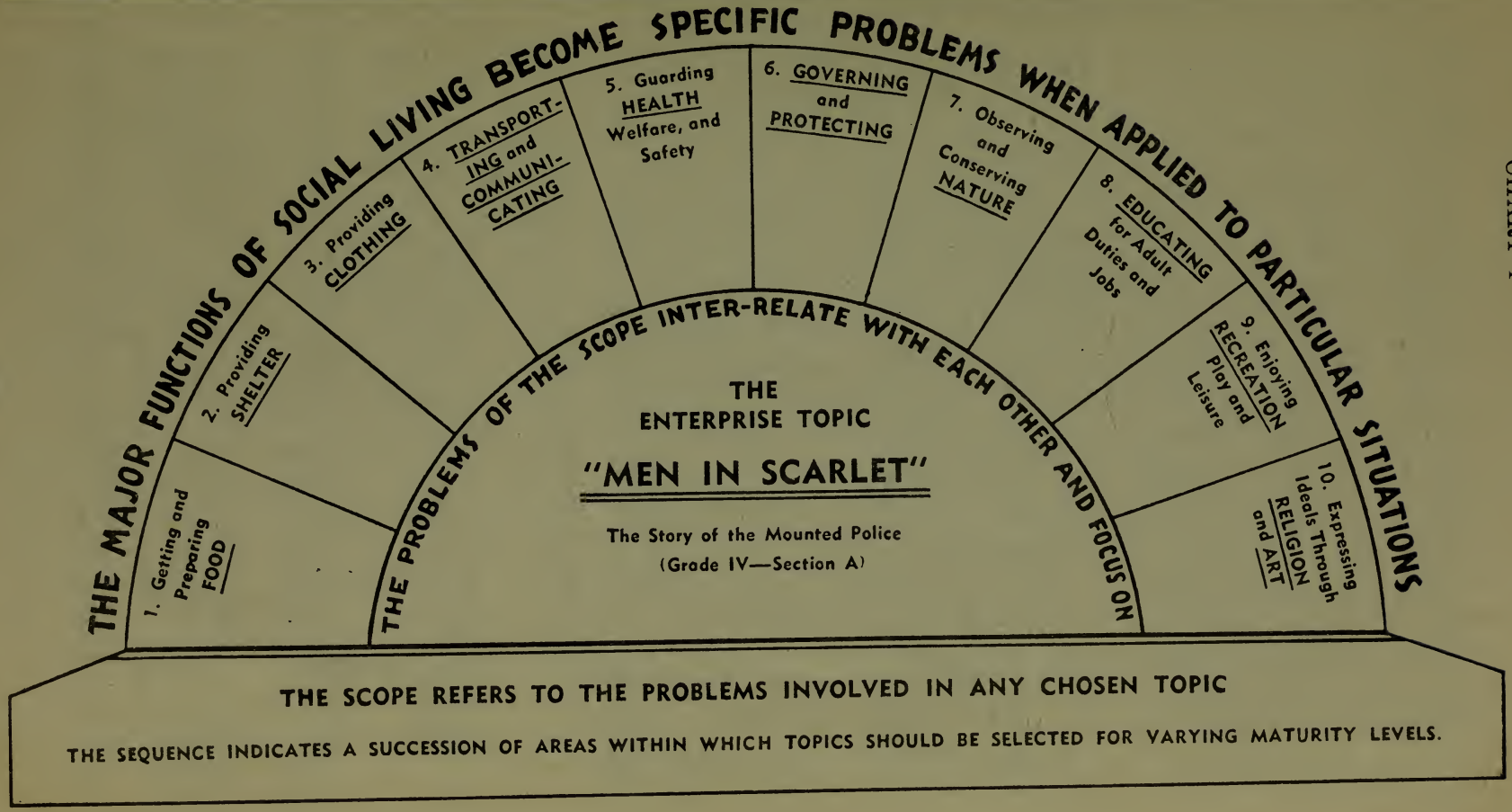

THE MAJOR FUNCTIONS OF SOCIAL LIVING BECOME SPECIFIC PROBLEMS WHEN APPLIED TO PARTICULAR SITUATIONS
1. Getting and Preparing FOOD
2. Providing SHELTER
3. Providing CLOTHING
4. TRANSPORTING and COMMUNICATING
5. Guarding HEALTH Welfare, and Safety
6. GOVERNING and PROTECTING
7. Observing and Conserving NATURE
8. EDUCATING for Adult Duties and Jobs
9. Enjoying RECREATION Play and Leisure
10. Expressing Ideals Through RELIGION and ART
THE PROBLEMS OF THE SCOPE INTER-RELATE WITH EACH OTHER AND FOCUS ON
THE ENTERPRISE TOPIC
"MEN IN SCARLET"
The Story of the Mounted Police
(Grade IV—Section A)
THE SCOPE REFERS TO THE PROBLEMS INVOLVED IN ANY CHOSEN TOPIC
THE SEQUENCE INDICATES A SUCCESSION OF AREAS WITHIN WHICH TOPICS SHOULD BE SELECTED FOR VARYING MATURITY LEVELS.

CHART I

(2) Providing Shelter.
(3) Providing Clothing.
(4) Transporting and Communicating.

B. **Working Together:**

This in turn covers several more—
(5) Guarding Health, Welfare, and Safety.
(6) Governing and Protecting.
(7) Observing and Conserving Nature.

C. **Living More Richly:**

This might include the remainder—
(8) Educating for Adult Duties and Jobs.
(9) Enjoying Recreation, Play and Leisure.
(10) Expressing Ideals Through Religion and Art.

Regardless of the particular organization of the areas of the Scope, some teacher attention to the details of each area will promote better teacher-learning conditions. Working out any Enterprise requires a variety of pupil activities and instructional methods. The directive function of the teacher should manifest itself in every section through the stimulation of pupil interest, an improving quality of pupil work, and an adequate coverage of content material. Careful consideration should accordingly be made of those phases of each problem most appropriate and revealing to the pupils and of the instructional methods that hold most promise in each case.

Since this bulletin concerns primarily the content materials for elementary schools, certain suggestive phases or sub-problems are included for each of the ten areas of the Scope. They are illustrative only, and are general in terminology. Teachers are advised in their own planning to state such sub-problems in terms that apply to the specific Enterprise chosen. For example, looking ahead, we see that in area of 'Getting and Preparing Food" the first sub-problem reads "How are food habits affected by climatic conditions?". If the teacher is preparing an Enterprise on Eskimos for Grade III that sub-problem might better read:

"How is the Eskimo's food affected by (a) the long, cold, dark winter?
(b) the brief intense summer?"

In another case the Enterprise topic may be one for Grade VI on "Merrie England". Then the sub-problem might read:

"What foods did they use during (a) the mild damp winter?
(b) the early spring and summer?"

Careful planning of various sub-problems will reveal opportunities for the natural introduction of concepts in Science, Health, Geography, and other integrated subject fields.

Most recent curricula call for some attention to consumer education. Regardless of circumstances every person in modern society functions as a purchaser. Despite its universality in our culture, consumer education has not been included as a specific area on the Scope outline. Two reasons are advanced:

(1) Consumption of goods or services represents a phase of nearly every one of the ten areas already chosen. The use we make of food,

clothing and shelter resources, and our opportunities in health, recreation and education, are all immediately related to consumer activities. Appropriate instruction then can be introduced at significant spots in any area.

(2) Consumer education, like character education, is not effectively learned through precept. Careful observation of others and actual first-hand personal experience in the selection, purchase and and economical use of needed materials must be added to classroom verbalization if desirable results are to accrue. Isolated instruction will have little effective carry-over, and teachers are urged to create and utilize all situations that offer any direct experience in this important field of learning.

Illustrative Sub-problems:

I.—**Getting and Preparing Food.**

(1) How are food habits affected by climatic conditions?
(2) What available foods create a balanced diet?
(3) What national customs, religious beliefs and social manners affect food habits?
(4) What seasonal changes are noted in food production?
(5) How has scientific preservation affected the food supply?
(6) What food wastage is noticeable in eating habits?
(7) What marketing facilities are available for food supplies?
(8) How has scientific study added to the food supply?

II.—**Providing Shelter.**

(1) How are homes kept warm?
(2) How are homes kept dry?
(3) What materials are used in building homes?
(4) How are the homes decorated?
(5) How are the homes ventilated?
(6) How are the homes suited to the vocations of their owners?
(7) How has science affected home building?
(8) What are the essential differences between homes and public buildings?
(9) What are some famous or important buildings?
(10) How does a happy home depend on each member?

III.—**Providing Clothing.**

(1) How do climatic changes control clothing habits?
(2) How do style and fashion changes affect clothing?
(3) What personal ornaments are commonly worn?
(4) What effect does clothing have on personal morale?
(5) What points should we consider in buying clothes?
(6) What determines the length of time clothing may last?
(7) How many people are concerned in producing the clothing?
(8) How has science improved the clothing supply?

IV.—**Transporting and Communicating.**

(1) How does transportation affect homes? clothing? food? health?
(2) How is transportation affected by mountains? rivers? deserts? forests?
(3) How does climate affect transportation?
(4) How has science improved transportation?
(5) How has science improved communication?

(6) How does communication affect our education? religion? art? government?

V.—**Guarding Health, Safety and Welfare.**

(1) How are homes made healthful and safe?
(2) How are occupations made more healthful and safe?
(3) What diseases are commonly encountered? What are their causes and cures?
(4) How can one individual assist in community health programmes?
(5) What are the common accidents and how can they be prevented?
(6) What things cause worry and unhappiness?
(7) How does climate affect health and welfare?
(8) How has science, particularly medicine, affected health?
(9) What does good health cost?

VI.—**Governing and Protecting.**

(1) What are the protections against fire? disease? robbery?
(2) What are the jobs government can do better than individuals?
(3) How can each person participate in democratic government?
(4) What opportunities for better living should a government provide?
(5) What things should each man do to make a better government?
(6) Under what conditions are laws withdrawn?
(7) What is self-discipline?
(8) How do law courts operate?
(9) How are laws made?
(10) What is public property? Who looks after it? Who pays for it?

VII.—**Observing and Conserving Nature.**

(1) What are domesticated animals?
(2) What are domesticated plants?
(3) How can domesticated animals be improved?
(4) How are plants and crops improved?
(5) How is soil improved?
(6) Why should wild animals be protected?
(7) How can the beauty of nature be preserved in the community?
(8) Why do we have parks?
(9) Why are natural resources important?
(10) What are the simple machines?
(11) What other bodies besides the earth exist in the universe?

VIII.—**Educating for Adult Duties and Jobs.**

(1) How can each individual make the most of educational opportunities?
(2) How can educational opportunities be offered to more people?
(3) How have our schools developed and grown?
(4) Who pays the costs of education?
(5) How can education repay these costs?
(6) How can education make life happier?
(7) What other means of education are there besides schools?
(8) What is advanced education?
(9) What responsibility does each pupil have in a classroom?
(10) How can schools be improved?
(11) How has science made education better and more interesting?

IX.—Enjoying Recreation, Play and Leisure.

(1) What are the various games children play?
(2) What are the usual recreations of adults?
(3) What benefits do recreation have on health?
(4) What is the proper balance between play and work?
(5) How does recreation affect government? education? shelter? clothing?
(6) What has science done to improve recreation?
(7) How can we improve recreation for farm people? city people?
(8) What is "commercial amusement" and how can it be made better?
(9) What community agencies are interested in recreation?
(10) How can we best spend personal money for recreational purposes?

X.—Expressing Ideals Through Religion and Art.

(1) What holidays have religious significance? How can we increase their significance?
(2) How do religious beliefs affect our daily lives?
(3) What are some beautiful expressions from the Bible?
(4) Why is a personal religious belief important?
(5) What influence has religion had in other days?
(6) How can a church add to modern community living?
(7) What are some religions other than Christianity which have valuable contributions to make?
(8) How do music and drawing influence our daily lives?
(9) Who have been some of the greatest artists and musicians?
(10) How can people develop good taste for all suitable forms of art?

SEQUENCE

Sequence refers to the succession of Enterprise topics developed by a class through six years of Elementary school. In the section on Organization reference has already been made to the necessity for some over-all pattern broad enough to enroll suitable topics at every grade level. In suggesting such an over-all pattern it is not intended that different schools and different classes must follow identical topics. In the process of selecting and outlining topics to fit particular interests, equipment, and tastes, a class finds fine opportunities for real personal development. However, there are certain general areas within which children may beneficially have common experiences. The aim in this Sequence has been to outline those areas in broad terms and in minimum number. **Teachers and classes are then at liberty to choose freely within these rather generous boundaries and to add desirable areas of their own selection as they move beyond the minimum requirements.**

The problem of continuity of experience is basic to good activity programmes. Units of work must of necessity utilize advantageously experiences from previous years, and must provide adequate preparation for future development. To avoid either useless overlapping or excessive disjointing of class experiences requires careful planning. It is suggested that a core pattern for minimum Enterprise requirements will tend materially to overcome this problem. Every teacher should realize that he has an important responsibility in establishing some year-to-year coherence in the units of work undertaken by his class.

The purposes, then, behind this Sequence might be summarized as follows:

1. To insure against overlapping and unnecessary repetition from year to year in Enterprise topics.
2. To insure against omission of areas of investigation that may rightly be considered desirable for understandings essential for further growth.
3. To outline suggestive areas within which suitable reading materials appear to be most available.
4. To maintain attention on the primacy of the Social Studies and related skills and concepts suitable for the Elementary School.
5. To suggest areas that have definite possibilities for the development of desirable basic concepts in the fields of History, Geography, and Science through Enterprise activities.

The basic areas of the Sequence are presented as statements of generalized problems. From Grade III to Grade VI there are four sections, labelled A to D. The complete outline of the Sequence is found in Chart II, page 32. As teachers examine this chart they are reminded of certain items:

1. The minimum requirements are four Enterprises per year. For Grades III to Grade VI **this means at least one Enterprise from each section each year.** This minimum regulation should be reduced only when the superintendent of schools agrees that special circumstances make fewer units desirable.
2. The generalized statements appearing in the chart are Section Headings and are not intended as Enterprise titles. Fuller explanation of each section is given on the indicated pages.

3. The general areas outlined in this Sequence are not intended to be all-inclusive. It is thought that an adequate year's work can be arranged within the suggested areas, but any teacher who wishes to introduce topics and additional Enterprises which do not fall within these general areas should feel free to do so provided these do not exclude satisfactory coverage of the four required sections.

4. The order of treatment of sections for any one year is completely optional with teacher and classes.

5. It is not essential that an Enterprise class follow one grade outline exclusively. This is particularly applicable when an Enterprise group enrolls two or more grades. After doing one or two sections from one grade outline it may desire to move for the remaining sections to an adjacent grade outline. For example a Grade III-IV class may take Enterprises from Section A, B and C, Grade III, then an Enterprise from Section D, Grade IV. It is hoped that the sections for grades within the two-year cycle will be found generally interchangeable. **Teachers who use different grade outlines during the year, or who use areas beyond the outlined Sequence are reminded of the necessity of sending records of such changes and additions along with the promoted class.**

6. Some effort has been made to set up sections in each grade from **III** to **VI** that will have special emphasis or significance in the development of basic concepts in particular subject areas:
   (a) The **historical** aspect will naturally be emphasized in Section A for Grades IV, V and VI. In Grade III Section B will tend to fit this same general classification.
   (b) The concepts of **modern living** or **contemporary cultures** are given special place in Section B for Grades IV, V and VI. Both Sections A and C for Grade III will bear out this theme.
   (c) **Geographical** understandings are basic in Section C for Grades IV, V and VI. Sections A and C for Grade III should both promote such understandings.
   (d) **Scientific** appreciations become a major concern in Section D for Grades III, IV, V and VI.

7. The mention of any suggestive topics in one section does not exclude it from appropriate consideration elsewhere. An illustration may clarify the point. Under Section C, Grade III suggestive studies include Switzerland, Norway, Japan, Holland, Italy, Iceland, Egypt, China and Arabia, only one of which might be used. There is no reason why the remaining countries might not be added to the suggestive list entered for Section B, Grade IV. Thus the teacher who feels his Grade IV class is neither ready for nor interested in handling a study suggested for Section B, Grade IV should feel free to use items enumerated in Grade III or Grade V. **This same degree of flexibility should be applied to the interpretation of the entire Scope pattern.**

8. Many teachers would like to present some study of Alberta each year, particularly during the last three years of

elementary school. They should feel free to adapt the Sequence to that end. It is suggested that Section A, Grade IV can be devoted exclusively to Alberta pioneers. Section B, Grade V can be devoted to a thorough survey of Alberta today, and Section 8, Grade VI can include a comprehensive review of Alberta within the over-all picture of Canada.

9. The Enterprise programme for Grades I and II has not been sectioned nor have generalized problem statements been attempted for these grades. It is considered to be usually desirable that the closest possible correlation be developed between the reading programme and the activity programme at this level. To outline specific problems or areas for the Enterprise period would naturally tend to separate rather than unite this material in relation to centres of interest in the primers and readers. Multiple authorization of readers seems further to encourage less formalization of Enterprise topics.

Outline of Sections

Chart II shows the four sections for each grade from II to VI, and makes definite reference to particular pages in each instance. The outline for each section developed on the specified pages is intended to offer some information and help to teachers who feel the need of further guidance. The few paragraphs concerning each section are intended to be suggestive rather than exhaustive and the ideas embodied are by no means prescriptive. Teachers should feel free to enlarge upon anything of direct value and to omit items not suited to their particular locality. For convenience and uniformity these discussions are centred around three headings:

1. Purposes of the Section.
2. Approach and Topics.
3. Major Learnings.

Purpose of the Section will deal briefly with the background involved in the choice of this particular section for the grade or grades concerned. **Approach and Topics** will deal with various introductions, points of particular emphasis and suggestive topics that normally come within the section. **Major Learnings** will offer suggestive examples of one type of summarization the teacher may use for the desirable understandings that are to be developed in the course of the Enterprise undertaken. The teacher may or may not wish to list the details of the factual materials connected with the Enterprise. He should however, be aware of the need for suitable understandings based on accurate knowledge. It is suggested that such understandings may be listed as generalizations to be established during the Enterprise activities. The Major Learnings provide guidance for this purpose.

It should be mentioned again that these ideas are presented simply for the assistance of those teachers needing such direction and are not to be interpreted as limitations nor prescriptions upon the teacher's freedom of action.

A particular appeal is made to the teacher in the matter of wording of titles and problems for the Enterprise. The class who labelled their project "Tree-Top Town" instead of "Birds" and "Heaven's Merry-Go-Round" instead of "Stars" had already attained a frame of mind conforming to the spirit and the letter of the Enterprise. Admittedly the matter should not be carried to the weird and ludicrous extreme, but some careful thought and ingenuity will pay good dividends.

GRADES I AND II

Point of View:

With the beginning pupil the school finds its richest opportunity for real creative direction and guidance. Into the school's sphere the child brings a body, a mind, and a personality, each at a most pliable stage of life. Through the environment it provides, the guidance it offers, and the controls it exerts, the school presents a major influence in determining the adult the child will become. The first two years likely present the most crucial educative experience the child will ever have.

"The whole child comes to school". Certainly no member of the teaching profession are more aware of this truism than are our primary teachers. In their position they accept the twin responsibilities of a sympathetic understanding of all the needs of young children and the maintenance of an environment that will adequately provide for the satisfaction of those needs through genuine child development. The beginning class is not actually a class at all; it is an assortment of unique individualists. Only as they participate in school and social experience do they gradually take on the homogeneity of attainment, the uniformity of behaviour, and the protective coloration of emotional expression that seem to be the disappointing inevitabilities of growing up. It is well that the primary teacher retain at all times an interest in and appreciation of the characteristic growth through childhood years. Then, if ever, the school owes the child the healthful practices that build strong bodies, the social guidance that makes good citizens, the personal recognition and affection that promote emotional security, and the stimulation and direction that lead to intellectual acuity. Through these avenues the school can contribute toward the wholesome personality and the substantial character of each pupil.

The beginning pupil has had little or no experience with a routine such as formal school attendance may represent. He is unprepared for the physical immobility and the interest "compartmentalization" that many schools seek to impose. His programme should be devised to offer adequate freedom of motion and integration of interests. As he progresses emphasis will shift to keep pace with the physical growth and socialization of outlook that move rapidly during early school years. From a programme that is made largely of individual manipulative experiences the child comes to handle many tools, materials and to learn processes. He learns to play and to work effectively with other children. He becomes increasingly aware of his relationship with other individuals and with groups, and of the possibilities for enjoyable group activities. He makes his first contact with systematic instruction in matters of information and skill. Progress is best accomplished when the teacher first insures a readiness and anticipation for these essential learnings. The transition from the play-activity stage to a work-activity stage should be a gradual, acceptable and enjoyable experience for the child.

Materials and methods will depend largely upon the maturity of the child, and upon the pronounced individual differences that may be exhibited during the first two years. The classroom that can provide an interesting home-like setting, and the teacher who can effectively use parent and home contacts will do much to assist in the proper adjustment of the child from the home atmosphere to the wider range of social grouping represented by the school.

SEQUENCE: A selection of social groups and social themes

Three-year cycle	Division I.		
Two-year cycle	Group 1		
One-year cycle	Gr. I	Gr. II	Gr. III
	Our Home Our Neighborhood	Our School	Our People of Other

SCOPE:

Problems arising from universal human neds.

1. These
2. ten problems
3. of the Scope
4. should
5. serve
6. to guide
7. the
8. development
9. of any Enterprise.
10.

These grades should use centers of interest from their reading program as Enterprise topics. Examples might include:

Our Family	Our School
We Play House	We Visit the Farm
Friends in Our Town	A Trip to the City
A Birthday Party	Our Flag
Pets	Plants That Help Us
Special Holidays	Animals that Help Us
The Market	Workers Who Bring Us Food
	Community Holidays

A.

How Our Community Lives

See page 40

B.

How People Live Without Machinery

See page 45

C.

How Modern Men Overcame the Obstacles of Geography

See page 48

D.

How We Use Natural Wealth

See page 51

Arranged in order of child interest and comprehension.

Division II.

Group 2	Group 3	
Gr. IV.	Gr. V.	Gr. VI.
Community Places and Times	Our Province Man Learns to Use the World's Resources	Our Country
A. **How Pioneers Settled the New World** See page 54	A. **How Canadians Established Themselves from Sea to Sea** See page 65	A. **How Men Lived and Worked Through the Ages** See page 74
B. **How We Live and Work in The Modern World** See page 56	B. **How Alberta Provides For Her People** See page 67	B. **How Men Live and Work in Canada Today** See page 79
C. **How Trading Improves Our World** See page 58	C. **How Global Patterns Affect Us** See page 69	C. **How We Control Global Patterns** See page 82
D. **How Brave and Wise Men Have Helped Our World** See page 60	D. **How Science Has Affected Our Culture** See page 72	D. **How Science Has Affected Our Industries** See page 85

Four Enterprises, one from each section, comprise a minimum year's work.

Eight Enterprises should be considered the practical maximum for any one year.

N.B.—(1) Sectional headings are not intended to serve as Enterprise topics. The indicated pages offer suggestions for treatment.

(2) The order of treatment of sections is entirely optional.

Purposes:

The major purposes of the primary programme correspond in general terms to those supporting the entire educational programme. The child is expected to attain an optimum personal growth and integration in every phase of life. He is expected to establish lasting loyalty to worthwhile principles and to express to the full his own identity in the pursuit of those ends. He is expected to participate in enriching experiences that add to his understanding of the world, around him. He is expected to acquire proficiency in skill subjects in the manipulation of tools and materials and the gathering of information. These purposes might be discussed at length, and would in general be applicable to all educative experience.

There are however, certain phases of these general purposes that are of particular interest and responsibility to teachers of primary grades. A consideration of these specific areas would certainly include, among others, the following outcomes:

(1) Proper adjustment, through sympathetic guidance and understanding, during the transition from the home to the school.

(2) Emotional security, founded in teacher affection, during the shift from a self-centered individual to an accepted contributing member of a group.

(3) Sensitivity to the rights, desires, and contributions of other people.

(4) Habits of safe and healthful living, established through opportunities for discussion and practice.

(5) Mental health maintained by group status, teacher respect and stimulating experiences in expression and co-operation.

(6) Enthusiasm for individual and group activities, that rouse and satisfy curiosities natural to childhood.

(7) Concentration of effort represented by consistent perseverance and by the desire to carry assumed tasks through to satisfactory completion.

(8) Care and economy in the use of materials and equipment utilized in school and at home, whether it be personal, group, or public property.

(9) Practice and increasing ability and comprehension in the essential skill subjects.

(10) Reflective thinking at his own maturity level as exhibited through expression of his own ideas, through acceptance of suggestion and advice, and through listening to and questioning of others.

(11) Effective expression through various media that reveals and promotes creative ability.

(12) Correction of physical disabilities and personality differences that may prove to be significant handicaps.

(13) Work habits that reflect established aims, physical comfort, economy of time, and intellectual maturity of proper degree.

(14) Recognition of the home, the school and the community as effective organizations for better social living.

Approach:

The planning of activities at the primary grade level must make adequate provision for the complete pattern of child growth. From

the physical standpoint recognition must be given to the normal activity of children by providing space, equipment and an appropriate physical education programme, to develop the big muscles of the body. The programme must also recognize the need for rest and relaxation at rather frequent intervals. Children love to handle objects and manipulate materials, there should therefore be accessible materials, beads, blocks, sticks, plasticine, crayons, scissors, etc., which they can use freely. Information about and practice in matters of personal cleanliness and hygiene will relate closely to daily routines both in school and at home. Outdoor play, washing hands, care of nails and hair, use of handkerchiefs, care of clothing, use of drinking fountain, suitable toilet habits are all important to young children during the school day. Attention to posture and to the protection of vision will demand proper seating accommodations, class exercises, suitably printed reading materials, proper study habits. Children with defective vision, hearing or speech control will need much attention during the beginning years. Every care should be exercised to prevent the spread of communicable diseases through the classroom as a contact area.

The "activity movement" covers far more than construction and manipulation activities. The pupil should expect to make some genuine progress in intellectual achievement. The young child enters school full of enthusiasm to learn. This eagerness can be maintained only through experiences that are stimulating to him. His many questions must be answered patiently and at his own level of comprehension. Through the reading and telling of stories by teacher and pupils, through properly-directed discussion periods, through excursions and simple experiments he can satisfy the curiosity that seems natural to children and basic to good scholarship. Occasional teacher efforts to suppress and inhibit the child's imagination seem a misuse of one valuable quality of intellect. The child should be taught to distinguish between the real and the make-believe, but the make-believe can be used to enrich the realistic. School experience should direct the imagination into educative learning through expression in dramatic play, in art, in music, in speech and in writing. Most children respond directly and immediately to success or failure and to the approval of teacher and parent. Tasks set as a challenge should not promote too-frequent failure. Teacher recognition of accomplishment is most satisfying to young pupils. Praise as a motivating technique should be readily available. Performance or special mention before the group is especially gratifying and should be experienced by every pupil. Associated closely with the desire for recognition is the ability to accept constructive criticism. Some sense of self-evaluation can be applied by very young children and should be encouraged at all times. Evaluation of criticism should, of course, be in terms of relative effort and ability rather than in comparable achievement. The ability to reason and to solve problems independently is a definite intellectual capacity. Opportunity to make decisions and assistance in looking ahead to probable consequences will promote a sense of independence and self-confidence. The short attention span that characterizes young children will require a varied programme presenting a rhythm of varied interesting activities each day.

Children have to learn proper social behaviour. The primary school child finds that in school he is not the sole centre of everything and that he must give and take to be happy. This re-adjustment is

very difficult for some children and can sometimes lead to serious emotional disturbance. The teacher should be ready to establish contact with parents and to enlist home assistance in effecting the socializing transition. Working in groups and committee organizations should not be forced but should be encouraged in shy children by an appeal to their strong sense of imitation. Social adjustment will come slowly to children whose contacts with other children have been rare in pre-school experience. Teachers should remember that at first some tendency to be selfish and self-centered will be perfectly normal child behaviour.

Emotional instability naturally accompanies new experiences such as beginning school. Whatever can be done to establish a home-like situation will reduce emotional upset. School routine should be explained and practised. The teacher should prevent situations such as those which accompany strongly competitive games and drills that may promote emotional tension. Physical activities can frequently be provided for children whose excess nervous energies make sitting quietly a difficult task. A strange environment normally provides some sense of fear, either specific or general. The young child should find in his teacher some expression of acceptance or affection that will offer a guarantee of security and stability.

The content materials for Grades I-II have not been sectioned, and no suggestions have been made as to the number of units of work that might constitute a year's work. The normal centres of child interest during these years are the home, the school and the neighbourhood. Within these areas teachers are free to select topics and items that appeal to the class or that have sufficient significance outside school to attract attention. It is suggested that in large degree the topics of the Enterprise experience follow the centres of interest around which the reading programme is built. In this connection it is noted that all the authorized reading series are organized on the unit plan which lends itself well to a correlation with the activity programme. Such a correlation has many advantages. It seems psychologically sound since early child interests tend to overlap into all areas of experience. Close correlation with the reading programme should tend to reduce the vocabulary difficulties that creep into all written expression. The readers with their wealth of illustration are attractive to children and form a core experience amongst the group where few other areas of common contact have been yet developed. Each reading series is accompanied by a pupil workbook that offers related reading activities for establishment and retention of word recognition and reading abilities. Each series has been compiled by primary specialists whose judgment is reliable as to areas of child interests and levels of maturity. Finally each series is accompanied by a teacher's guidebook which offers many excellent suggestions for enrichment activities that supplement the reading programme and serve as a beginning for further Enterprise experiences. Teachers are accordingly advised that whenever possible fullest liberty should be exercised in correlating the reading programme and the Enterprise activities. The activity programme should be organized as an addition to a full basic reading programme, but should utilize the presented centre of interest as a core for expansion into suitable related areas of child experience. In this connection the teacher's guidebooks that accompany the reading series in use become practically indispensable.

Special attention should be given to the opportunities presented

by festivals and holidays. Children enter whole-heartedly into the dramatic play and all the types of constructive activities that can be associated with Hallowe'en, Thanksgiving, Christmas, St. Valentine's Day, Easter, Empire Day, Dominion Day, local celebrations and individual birthdays. The organization of the unit, in both content material and activity method, should recognize the short interest and concentration span that these children normally display. Frequent changes of topic with recurrent emphasis on highly desirable concepts will prove beneficial and interesting. Increased length of effort and interest should keep pace with maturity.

Major Learnings:

The following generalizations should represent the type of permanent learning outcomes in the content field that might be expected at the primary level:

SOCIAL STUDIES:

1. Food should not be wasted at home or at school.
2. The mailman brings us many essential messages.
3. Marking or writing on walls spoils the appearance of home and school buildings.
4. Holidays bring us fun and games.
5. "O Canada", is our national anthem.
6. The Union Jack is the flag of our country.
7. Clocks help us divide our time properly for work, play, study, rest, eating and other activities.
8. Everyone should have definite tasks or chores at home.
9. We should obey our parents and teacher cheerfully and readily.
10. Gardens and flower beds make our homes more attractive.
11. Firemen have special training and equipment to protect our buildings.
12. Farms supply us with fresh food and milk.
13. Many of our foods come from distant countries.
14. At church and Sunday School we learn stories of many good, brave men.
15. Our Christmas and Easter holidays are connected with the life of Jesus.
16. The carpenter knows how to use and care for his tools.
17. Books should be carefully treated, whether they are our own or borrowed.
18. Through music we can express many feelings.
19. Our parks and picnic grounds must be kept clean and attractive. (To be added to by the teacher).

HEALTH:

1. Careless running and pushing causes many accidents.
2. Bedroom windows should be open each night.
3. Food should be chewed well at every meal.
4. Candy between meals spoils our appetite.
5. Children should sleep at least ten hours every night.
6. Clean clothes make us feel and look much better.

7. Washing our hands is necessary before every meal.
8. Scissors and sharp pencils should not be used as playthings.
9. Cheerful children are liked by all their companions.
10. Lunch scraps and papers should be disposed of properly.
11. Teeth should be brushed twice each day.
12. Foreign objects should not be placed in the ear, eye, nose or mouth.
13. Plenty of good light at all times will help save the eyes.
14. Games are most fun when everyone obeys the rules.
15. Flies, mice, gophers and rats all carry diseases.
16. Broken bottles, nails, wire, etc., spoil playgrounds.
17. Playing with matches has cost many children's lives.
18. Walking and playing on the railroad is dangerous.
19. Fire drills may save some one's life.
    (To be added to by the teacher).

SCIENCE:

1. Some animals store food for winter.
2. People look after some animals in cold weather.
3. Every person must know directions of the earth.
4. The sun takes water into the air.
5. Clouds are really tiny raindrops floating around.
6. Song birds make our community more pleasant.
7. Machines help us to travel quickly and easily.
8. Machines help produce food, clothing and homes.
9. Books can be used for many purposes.
10. Days are short and nights are long in winter.
11. We wear different clothing in each season.
12. Each season brings different games and play.
13. Thermometers measure heat.
14. "Northern Lights" (aurora borealis) are seen in winter.
15. Trees prepare for winter by shedding their leaves.
16. Animals get warm coats for winter.
17. Birds go south for winter.
18. Some animals change color in winter.
19. In spring each bird builds its own kind of nest.
    (To be added to by the teacher).

GRADES III-IV

POINT OF VIEW:

Children in these grades are ready to show a definite independence in thinking and in work habits. They should be able to accept longer assignments and carry them through without constant teacher attention. Reading and writing skills should be developed to the point of usefulness in handling assignments in Enterprise work on either an individual or a committee basis. In connection with reading assignments teachers should be sure the desired information is included and that the vocabulary is not too discouraging. On the other hand the responsibility for definite assignments should be placed upon the pupil. Auxiliary skills such as using the dictionary, the table of contents and the index, should be practised and encouraged. Increased care in handling materials, increased ability to follow directions, and lengthened concentration span should be reflected in improved pupil handwork.

As previous grades have been marked by a remarkable growth in skills, abilities and controls, so the Grades III-IV level is marked by a remarkable expansion in pupil interests. For the first two years of school the child's interest has been largely concerned with people and things in his immediate environment, and particularly with the relation to those people and things to himself. Now the child begins to see his community in an expanded sense in which he and his companions can find interesting living without occupying the central role at all times. As these two years progress his interest can go beyond the face-to-face relationships of his immediate environment to the vicarious participation in the deeds of other days and other places.

By this time definite remedial work will be under way with weaker pupils. Significant physical deficiencies should have been located, appraised and treated. Increasing consciousness of unusual traits begins to affect behaviour patterns. Permanent dentition and the beginning of a developmental acceleration of girls are two major physical changes of this age period. A definite improvement in muscular control is accompanied by an increased appreciation for action. Stories, both real and fanciful, corresponding to this interest serve to supplement and encourage pupils' own activities. Zeal often dominates judgment, and they enthusiastically undertake more than they are capable of accomplishing. Teacher guidance in setting tasks and standards of accomplishment is important.

Grades III-IV children are entering the stage of social consciousness. Past behaviour has tended to centre around individual desires and wishes. In a few years the "gang" will be the dominating consideration to which all else must bend. In this transition period impressions of group responsibility and of social acceptability become increasingly important. Stress should be maintained on the importance of individual choice and responsibility even in activities and performances of a group nature. Being a member of a group does not relieve the individual of the choice of right and wrong in his participation.

Protective devices for emotional disturbances are developing and have a direct reflection on character formation. The intense physical activity of pre-adolescence frequently results in inconvenience to sedate adults. Scolding and punishment influence pupil-teacher relationships; disciplinary measures, when necessary should arise from real infractions of rules which have been accepted by the child rather

than from any disturbance of adult comfort. The question of failure and its psychological impact is important since the child is too ready to accept a job beyond his capabilities.

The child has learned to distinguish fact from fancy and questions of honesty and right can be discussed on the basis of reason and social and personal consequence rather than on the more capricious basis of personal favour. Actually children of this age do not question much the validity of values and regulations set up by their elders. They may violate the attendant rules, but such action is a lowering of, not a challenge to, the standard.

Impressionability is at a maximum in these grade levels, and teachers should make the most of the opportunities for character development. Good juvenile literature suitably presented and careful personal example are reliable avenues of influence. Personal conferences to discuss the child's errors without undue censure or punishment establish durable relationships. Proper regard for the child's expressed desires and confidences is essential in the teacher's task of building "the inner man".

Grade III

Section A—HOW OUR COMMUNITY LIVES

Purposes of the Section:

Without doubt this is the most important section of the Grade III year, and should be given a thorough treatment by every class. At this age level the child's interest should begin to broaden to include many people and things whose relation to him is more casual than the family or the school. The emphasis should tend to shift his attention from how other people aid him and his family in obtaining the comforts and necessities of life to a wider concept of the interdependence of **all** the people who have frequent and direct contact with each other. He can now begin to realize that not only does **he** depend on the baker, the mechanic, the carpenter and the policeman for the richness of his living, but that all these people depend on each other. The enlargement of this concept is the realization that **he** should be ready to offer service in some degree.

Furthermore, his increased maturity enables him to understand more and more of the reasons for our ways of living. He can see the relation of climate to our problems of food, clothing, shelter, school and games. He can begin to realize that natural resources are provided independently of man, and that in order to benefit from them he must learn more about them. He can appreciate that people behave in an intelligent fashion, using what they know about the world to improve living for themselves and for others, and seeking more and better ways of providing the means of life.

Coupled with this idea that people can and do control their behaviour in the light of the various circumstances they encounter, should come the idea of individual responsibility. Community action is the summation of individual action. In national affairs the individual's remoteness from the seat of government, his seeming insignificance in the great mass of population, and his ineffectualness in the face of pressure groups, political lobbies, and vast centralized organizations and controls, often induce a feeling of frustration and impotence. But

on the smaller scale of day-to-day community living the significance of the individual and his influence in the direction of social affairs can be made manifest.

One further purpose of this section is to increase the child's acquaintance with the people, the processes, and the things to be found within his community. Two factors should be of assistance in deepening such understandings. First, natural curiosity seems to be a normal quality of childhood, and second, the investigation of unknown areas can easily be linked to outwardly familiar objects.

The teacher should not suppose that these purposes can be fulfilled in one Enterprise or even in one grade. A pervading fundamental purpose of the entire elementary school is to help the child reach an understanding of the social milieu and of his place therein. Participation in community activities provides the essential means for translating personal values and individual needs into concrete behaviour. All the Enterprises for the next four grades are intended to contribute ultimately and in varying degree to that. This introductory effort should, then, set a careful stage and a firm foundation, as well as provide a satisfactory experience in itself.

Approach

It is intended that this section will promote a rather comprehensive Enterprise in which the child gets a definite presentation of **his community operating as a unit,** both in meeting the needs of the people who live there, and in its relationships with other communities. In consequence the major emphasis of the Enterprise is limited in only one respect; it must deal directly with the community in which the child lives. The importance of this section can scarcely be over-emphasized since it introduces many concepts and appreciations that must be reinforced by the work of succeeding grades. Understanding community living and preparing for optimum individual participation in that living is a basic goal of elementary education. Teachers are accordingly urged to give exceptional care to this section. In developing their Enterprise, attention is drawn to the following considerations:

1. Because of its importance this section may well occupy more than one-fourth the year's available time. In some cases where the teacher plans more than the minimum four Enterprises, he may wish to develop two Enterprises centering around the immediate environment of the pupil. This procedure should be a satisfactory one provided the teacher does some careful planning to avoid overlapping or omission of materials.
2. The full range of the Scope should be employed in developing the Enterprise for this section. Some appreciation of many types of community problems should be developed. The organization of the problems and their presentation is left to the discretion of the teacher. Two suggestions mentioned in the Scope discussion should be noted:
   (a) The ten areas of the Scope may be organized as ten problems within the Enterprise, worded of course to suit the vocabulary level of the grade.
   (b) Some combination may be effected to present fewer major areas. A natural grouping evolves itself around the topics "Earning a Living in Our Community", "Working Together in Our Community" and "Richer Living in Our Community". See page 22 for a fuller discussion of such groupings.

ENTERPRISE TITLE

"WELCOME
A BOOKLET FO

Possible Science Generalizations

1. Plants require moisture, warmth, and good soil to grow well.
2. Animals require food, water and shelter to stay fat.
3. Some plants provide us with food from their leaves, some from their stems, some from their seeds, and some from their roots.
4. Water and wind spread most of our weed seeds.
5. Some plants grow from seeds and some grow from last year's roots.
6. The earth spins like a top to cause day and night.
7. Maps are really pictures of our earth.
8. A compass always points north.
9. Fires will not burn without fresh air.
10. The wheel is one of our most important inventions.

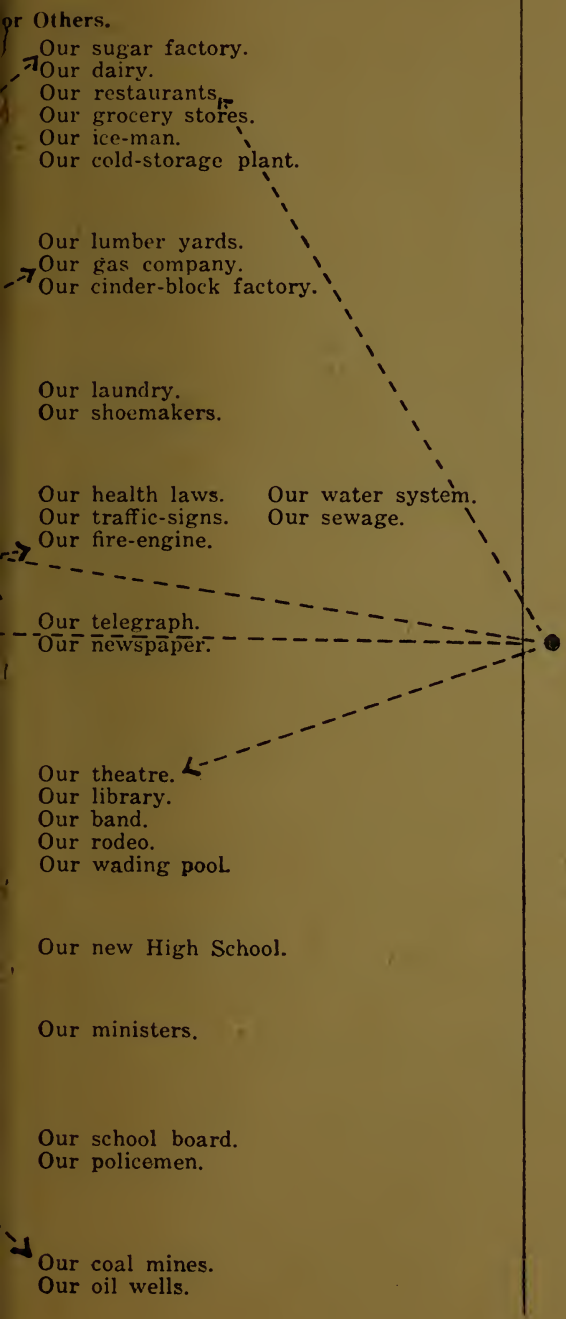
Possible Items for Pupil Discussio

1. **How We Get Food for Ourselves an**
   - Our crops.
   - Our feed-lots.
   - Our canneries.
   - Our elevators.
   - Our irrigation system.
   - Our pickle tanks.
2. **How We Build Our Homes and Stores**
   - Our homes.
   - Our stores.
   - Our hotels.
   - Our electric-power company.
3. **How We Get Clothing**
   - Our clothing stores.
   - Our dry-cleaners.
4. **How We Guard Our Health and Safet**
   - Our hospital
   - Our doctors.
   - Our nurses.
   - Our dentists.
   - Our druggists.
   - Our health officers
5. **How We Carry People and Messages.**
   - Our railway.
   - Our highway.
   - Our airport.
   - Our beacon.
   - Our school buses.
   - Our garages.
   - Our post office.
   - Our telephones.
6. **How We Play and Have Fun.**
   - Our school yard.
   - Our skating rink.
   - Our swimming pool.
   - Our ball-ground.
   - Our park.
7. **How We Get an Education**
   - Our school.
8. **How We Go to Church**
   - Our churches.
   - Our Sunday-schools.
9. **How We Govern Ourselves**
   - Our town council.
   - Our mayor.
   - Our student council.
10. **How We Use and Enjoy Mother Earth**
    - Our trees and flowers.
    - Our birds and animals.
    - Our river.

TO TABER"
1947 TOURISTS

Grade III—Section A

Reports and Investigations



Possible Health Generalizations

1. We grow enough fresh vegetables and fruits for all our meals.
2. We can and preserve food for other people.
3. Good rest is essential at home, in hotels, and while we are travelling.
4. Our homes must be heated and ventilated properly.
5. Each person should look after his own clothing.
6. Each person must watch his own health since a few doctors must look after many people.
7. Streets and railways are not safe playgrounds.
8. Immediate care should be taken of small injuries.
9. Diseases may be most easily caught in crowds.
10. Many people in the community affect our health.
11. Outdoor play makes healthy bodies.
12. Field work is too hard for children.
13. We have many health hazards that can be removed.
14. A good water supply is so important that we spend thousands of dollars on it each year.
15. Playgrounds must be kept free from wire, nails, broken glass, etc.
16. Our town will be attractive only if everyone does his share.
17. Happy people work and play in proportion.

The teacher should be ready to use any other arrangement which may suggest itself to him.

3. The community itself contains many motivating and enlightening resources. Such resources should be carefully explored and fully utilized. The alert teacher will take advantage of local landmarks, local history, community parks and projects, local elevators, stores, factories, etc., as well as persons in the community who can visit the school or be interviewed for information of interest and value.

4. While the main attention of the Enterprise must focus on the particular community and its background, a variety of introductions, themes or motifs can be devised for its development. The originality and ingenuity of the teacher and class are the deciding factors. Two considerations are basic: the approach must be broad enough to include the desired scope, and, it must catch the interest of and appeal to the children themselves. The strongest motivation may frequently come from some community project. It may be that "Clean-Up Week", a community "Harvest Supper", a sports day or a community skating rink can be skilfully used to focus attention on some aspect of community living and set the theme around which the Enterprise will take shape. A class newspaper dealing with various community problems in recurrent issues, or a series of letters to distant pen-pals are suggestive motifs for community Enterprises. Any community item of wide interest and some genuine significance may be used to open the field of community circumstances and community living.

Major Learning:

A suggestive list of the type of generalizations to be established by this section in:

A.—SOCIAL STUDIES:

1. Our community contains many people who have come from distant places to live here.
2. Our town council and our school board are chosen by the people of this district.
3. Our parents pay taxes to help run our community.
4. Our community does not produce enough kinds of food for all its people.
5. We do produce a surplus of food of some kind which we sell to other areas.
6. There are many rules about running our schools, some coming from our government, some from our school board, some from our principal, and some from our room.
7. Our homes must first be made to stand very cold winters.
8. All the materials for our clothing are made in large factories.
9. Diseases and accidents can be very costly.
10. Our policeman has a great deal of work to do besides arresting wrongdoers.

(To be added to by the teacher).

B.—HEALTH:

1. We can grow many fresh vegetables in our own gardens to last all the year.
2. Plenty of good rest is essential.

3. Each person must watch his own health since few doctors must look after a great many people.
4. Streets and railways are not safe playgrounds.
5. Diseases are most easily caught in crowds.
6. Our homes must have proper heat and ventilation.
7. Many people in our community directly affect our personal health.
8. A good water supply is so important that we spend a great deal of money to get it.
9. Our community will be attractive only if everyone does his share.
10. Happy people work and play in right proportion.
(To be added to by the teacher).

C.—SCIENCE:

1. Plants require moisture, warmth and good soil to grow well.
2. Animals must be fed, watered and sheltered to grow well.
3. Some plants provide us with food from their leaves, some from their seeds, some from their stems, some from their roots.
4. Water, and wind spread most of our weed seeds.
5. Some plants grow from seeds and some grow from last year's roots.
6. The earth moves to cause day and night.
7. Maps are really pictures of our earth.
8. A compass always points northward.
9. Fires will not burn without fresh air.
10. Wheels are one of our most important inventions.
(To be added to by the teacher).

Section B—HOW PEOPLE LIVE WITHOUT MACHINERY

Purposes:

This is the first section in which the class are definitely removed from the face-to-face situation of their own environment. It is, in a sense, their first major experience with other people with whom they have had little or no direct contact. Accordingly, care should be exercised to insure that this introduction will be a pleasant and profitable one.

The primary purpose of the section is to reveal the organization and the functioning of a society stripped of all the specializations, interdependencies, and mechanizations of modern civilization. To attain this view the societies selected for study should be such that, in comparison with our own, their organization is skeletal and their mode of living simple. Stripped of their complexities, the fundamental problems of satisfying human needs are more clearly discerned by the young pupil. Getting food is no longer a matter of running an errand to the corner store or visiting a market with a shopping bag. The complete processes involved in fulfilling the basic needs are more direct, more localized and in consequence more easily understood.

A purpose related to the one previously noted is the revelation of the direct relationship that exists between environment and the mode of living. In a simpler culture the effects of geography, climate and natural resources upon human problems are immediate and pronounced. To see that essentially the same relationship exists even in a complex society is a desirable outcome. Tied closely to this relationship of man and environment is the concept of man's adaptability and man's inventiveness. The child should realize that starting

with a set of given materials under a particular natural environment, the primitive people have arrived at solutions that are remarkably satisfactory.

Still another purpose to be attained is the development of respect and tolerance for other people. This introduction to children of other lands is important in determining an attitude toward people whose standards of living are quite unlike our own. To this end emphasis should be placed upon the desirable traits exhibited by the people rather than upon their shortcomings. In the same tone, we should emphasize the similarity between the basic problems of their life and ours at the same time that we note the differences in the solutions evolved.

Experienced teachers will recognize in this section many opportunities for developing valuable ideas in geography, science, and health under the stimulus of natural child interest. One precept of good teaching to be remembered is that such concepts should be so directed as to deepen the appreciation of our own culture and its rich living experiences. The necessity for building adequate value patterns is ever present. In discussing the values set by primitive people on both the materialistic and the intangible aspects of life, the class should add something to their own sense of what is worthwhile.

Approach:

The study of primitive people has already become a favourite Enterprise topic in Alberta schools. In fact items from this section have been used almost too widely, and "Indian" Enterprises have flourished from Grades I to VI. **It is intended that the study of primitive societies shall be confined to this section of the Sequence.**

The most effective approach to any Enterprise in this section will emphasize the universal similarities in problems of social living and the direct effect of natural environment upon the habits of life. The children should realize that many groups of people, relying largely upon individual acumen and co-operative ingenuity, are able to maintain normal functions of living in environments of all types. They should develop a deep respect for the people who can meet the universal problems of living without the benefits of the technology that so dominates our culture.

In selecting topics, teachers should recognize the fact that distinct changes in time and place are relatively new to these classes, and must have special attention in teaching procedures. Some may prefer to introduce the factors of chronological and geographical change more gradually. In that case they may choose a topic that concerns only chronological change (e.g. Indian culture as it once existed on western plains) or only geographical change (e.g. present-day Eskimo life).

The study of maps and the practice of map-drawing may be gradually introduced during the year, and the globe should become an essential classroom tool. Globes and maps devised particularly for early grade levels will be found most useful. While a definite survey of global patterns is reserved for Grades V-VI preliminary information about the world and how it is represented on the globe and the map can be started in Grade III. The symbols and diagrammatic devices for land masses, lakes, oceans, islands, rivers, mountains, etc., should be introduced if and when they are needed.

To obtain optimum benefit from this section some definite effort must be made to establish a sound appreciation of the actual social

and environmental conditions represented by the selected Enterprise topic. Visual aids, particularly films and slides, should be freely used when available. The chief value of much of the manual activity connected with Enterprise lies in the contribution it makes toward this "self-identification" of the pupil with other people and other places. Manual experiences should accordingly be designed with this outcome in mind. Another factor that should influence the tone of the Enterprise is the fact that the class will inevitably maintain the viewpoint of children. Those phases of living that normally interest Grades III-IV pupils, including the activities of children of other cultures, should be given special attention.

Past practice has revealed a tendency to attach major emphasis to problems relating to food, clothing and shelter. Important as these features are, teachers are requested not to omit consideration of other equally important factors of complete living. Artistic qualities, development of music, games and recreation, ideas concerning the Deity and religion, methods of communication, language and writing habits, educational methods, governmental procedures can make interesting, informative study, and are essential for the fullest appreciation of life. For comparative purposes a frequent reference to our own ways of living will promote the retention of information and the expansion of previously learned concepts.

As the heading of this section would indicate, the choice of topics should be limited to those societies which have developed some competence in living without the extensive use of machinery and mechanical power. The following list is presented as suggestive choices:

1. Indians of the Western plains.
2. Eskimos of Canada's Northland.
3. Indians of the Amazon Lowlands.
4. Natives of the Congo Basin.
5. Bushmen of Australia.
6. Bedouins of the Desert.
7. Laplanders.
8. South Sea Islanders.
9. Aztecs of Mexico.
10. Hopi Tribes of the South West.
11. Indians of Eastern Canada.

Teachers will add other appropriate topics as they suggest themselves from time to time. Class interests, motivating circumstances, and source materials should influence the final selection.

Major Learnings:

Basic understandings can be expressed in two ways. The first type of generalization would apply to **all** primitive societies, e.g. "Homes are made of first-hand materials, with little or no processing being involved." The second type of generalization would apply only to the particular society under study, e.g. "Eskimos build winter homes of snow and summer homes of animal skins." For the elementary grade levels the second type of generalization would seem preferable. Consequently the sample generalizations given here refer to a specific study, "Indians of the Western Plains." For other topics similar lists can easily be derived.

SOCIAL STUDIES:

1. Food supplies varied and fluctuated with the seasons.
2. Food supplies were preserved by dehydration.
3. Homes were temporary structures, easily moved.
4. Clothing supplies involved a fine art of tanning animal skins.
5. Travel, while frequent, tended to be cyclic.
6. Music marked by strong rhythmic accent expressed itself in drumming, accompanied by dancing.
7. The medicine-men, representing religious motives, carried authoritarian power at times.
8. Governing chiefs represented highest prowess in warfare.
9. Each tribe maintained a council-tent as the general meeting place.
10. Indian art represented narrative of war or hunting.
11. Division of labour threw heavy domestic burdens on women.
    (To be added to by the teacher).

HEALTH:

1. The Indians were not all fine healthy specimens.
2. Herbs were frequently used for treatment of external injuries and first aid.
3. Illness was closely associated with superstition.
4. The condition of the teeth was uniformly good.
5. The Indians had little or no immunity to "civilized" diseases.
6. Food habits were most irregular.
7. Infant death rate was high.
8. The body was frequently decorated by paints, scars, etc.
9. Lack of cleanliness was marked in all tribes.
    (To be added to by the teacher).

SCIENCE:

1. Rivers were important factors in the Indian's travel.
2. Rivers and lakes were important in both fishing and hunting.
3. Seasons were important in food supply.
4. The sun, moon, and snow served as time-piece and calendar.
5. Bow and arrow and spear represented simple machines.
6. The travois represents a simple machine.
7. First the dog, later the horse, were the only available draft animals.
8. Plants supplied fibre, wood, bark, dye, besides food.
9. Western Indians had no domesticated plants.
10. Flint stones served as knives and weapons.
    (To be added to by the teacher).

Section C—HOW MODERN MEN OVERCOME THE OBSTACLES OF GEOGRAPHY

Purpose:

During the third year, pupils' interests expand rapidly. After a thorough investigation of the home community the class is ready to examine what other people are doing in other lands. This section is devoted primarily to broadening pupils' interests, deepening their understanding of social living in a greater variety of circumstances, and extending their knowledge concerning the basic concepts of modern geography. To this end they must become acquainted with people of distant lands, how they live, and why they live as they do. From this study should come an appreciation of the effectiveness of such living and of the contribution these people can make toward life in Canada through an exchange of ideas and of goods.

The topics in this section deal with cultures that have established themselves in regions dominated by some outstanding geographical circumstance, such as mountains, the ocean or great rivers. Ways of life in such regions have a different cast than in lands where such geographical dominance does not exist. Under the stimulus of nature as represented by the preponderant phase of unusual geography, men have devised, through hard labour and human ingenuity, ways of satisfying the ever-present needs of humanity. In these lands we frequently find remarkable expressions of high moral values. Instead of fearing and hating the land that asks so much in time and effort to yield a livelihood, the reverse may often prevail, and the people love and defend their homeland with a zeal that sometimes surprises people in this new rich land of Canada. In summary, the purposes of this section appear as:

1. To understand the ways of living in unusual geographical circumstances.
2. To appreciate the ingenuity and control over forbidding Nature men can exercise when necessary.
3. To learn more of the geography of the "one world" in which we all live.
4. To appreciate the value patterns developed by other people and to consider the good examples they may frequently offer us.

Approach:

Enterprises from this section should carry a major emphasis upon the routines of daily living that have been developed in these lands where geography seems almost an overshadowing influence. The life children lead in these far-away lands should receive more attention than the adult activities that so often have little appeal to young pupils. The ten problems of the Scope should offer guidance to relevant activities. Information regarding the artistic and cultural phases of living can easily be incorporated.

Some definite teaching effort can be devoted at this stage to further the development of geography and space concepts. The idea of maps, first begun as scale drawings of the school yard or the community, can now begin to take on further elaboration in the way of forests, rivers, lakes, mountains, etc. The correct use of map symbols, simple ones of course, should grow out of the idea that maps are really pictures, reduced to very small size and to very simple features. The coloring of maps might be started, using colors that at least approximate the standard color key for relief maps. Simple concepts of causal relationships can be introduced, as for example the relationship between altitude and temperature, or between temperature and forest growth. In discussion of mountains, oceans, islands, winds and seasonal changes, the effect of these geographical features upon daily living habits should be the keynote. The problem of the earth's shape as represented by the globe is rather difficult and should be reserved for multiple grade classes or mature Grade III groups. Global concepts can best be handled when they become most significant to the people and problems under discussion, and, since this section deals with regions primarily as entities, the need for global survey will be minimized.

At all times the study of other people should be accompanied by an attitude of sympathy and esteem. Every culture has faced

problems similar to ours, and in every case a different set of factors has created difficulties and limitations. The solutions to these problems, when we examine them carefully, are on the whole admirably suited to the circumstances. World citizenship is not to be built solely upon opinions of forbearance and tolerance for other people, but rather upon an insight into their true environs and problems and an admiration for their progressive accomplishments.

Suggestive topics to which teachers can readily add, include a consideration of life in:

1. Switzerland (Mountains).
2. Norway (Mountains and Sea).
3. Japan (Island).
4. Holland (Land Below the Sea Level).
5. Italy (Mountainous Peninsula).
6. Iceland (Northern Island).
7. Egypt (Nile Valley).
8. China (Yangtze Valley).
9. Arabia (Desert).

Major Learnings:

(Life in Switzerland as a typical selection).

SOCIAL STUDIES:

1. Switzerland has few large cities.
2. Swiss people have no language of their own but speak German, French and Italian.
3. Dairying is the most important type of agriculture.
4. Famous Swiss handicrafts include carving, toy-making, weaving, embroidering.
5. Swiss watches are famous all over the world.
6. Road-building has been very difficult.
7. Switzerland is entirely surrounded by other nations.
8. The tourist trade is very important to the Swiss people.
9. Swiss people are noted for their love of freedom and their freedom from war.
10. The Swiss people are very fond of music and singing.

HEALTH:

1. The high dry air makes Swiss hospitals and sanatoria famous.
2. Swiss people are noted for their clean colorful clothing.
3. Swiss homes are noted for their cleanliness.
4. Swiss people are expert skaters and skiers.
5. Mountain climbing is a favourite Swiss sport.
6. The people are friendly and cheerful.
7. The Swiss are noted for their ideals of freedom and patriotism.
8. The Swiss Red Cross is famous for its war time work.
9. Switzerland is noted for its very fine food, particularly cheeses.
10. Swiss people are expert rescue workers and have even trained dogs to give aid to lost travellers in the Alps.

SCIENCE:

1. Mountain animals have special ways of running and feeding to suit their habitat.
2. Mountain plants have learned to live in cold rocky earth.
3. Glaciers have an important job in soil making.
4. Steep land can be terraced to allow some farming.
5. Natural beauty has a high commercial value in some places.

6. Forest conservation is important to mountain people.
7. Swift streams can take the place of small engines.
8. Heavy snowfall brings many benefits.
9. A "tree line" is caused by poor soil and cold weather.

Section D—HOW WE USE NATURAL WEALTH

Purpose:

Science plays a major role in nearly every phase of modern living. Every Alberta community feels its influence in providing essential services. The routine life of each individual, regardless of age or vocation, touches countless times upon the technology science has devised. No modern educational system can be complete without a direct effort to introduce the students to some enduring appreciation and functional understanding of the place science has in the normal routine of our daily lives. The importance of science in modern culture rests largely upon the changes it has effected in the behaviour and thinking of the general citizenry. The facts and experiments of pure science are of little immediate concern or practical interest; the practical applications through technology have been probably the most decisive factor in our culture. The emphasis of science teaching in the elementary school should be on understanding the applications of science rather than on rote learning of the facts and laws of science itself.

To this end science has been incorporated as a phase of the Enterprise activities and, properly applied, it has a rich contribution to make to childhood experiences. Many teachers have, however, experienced some difficulty in relating science to their activity programme. The fundamental approach in this Sequence has been developed from a social problems angle. The difficulty encountered in the past with science must, then, claim definite attention. The final section for each grade has accordingly been planned to promote so far as possible the integration of science into Enterprise learnings through a consideration of its influence in social problems and the solutions of present-day civilization. Teachers will, of course, continue to relate relevant science learning at every opportunity in **all** Enterprises. It is hoped, however, that teachers who in past years have found difficulty with respect to the integration of science will see in these final sections opportunities to investigate thoroughly some field of elementary science that will provide a compelling educative experience for their classes. If any feel that further time is imperative for the science field their attention is drawn to the section on Parallel Activities (page 88) and to the opportunity to introduce additional Enterprises in whatever fields may offer special benefits to their classes.

The outlined purposes of this section apply then, in large measure, to Section D for all grades. Specifically these purposes can be summarized as follows:

1. To present new experiences that will lead to the growth of new and challenging interests in the field of science, particularly with respect to the natural environment (nature study).
2. To promote a deeper understanding of the contribution of science to life in modern civilized nations and a more complete understanding of the struggle that has been attendant upon its expression.
3. To introduce to the pupils the elements of the scientific

methods of problem solving and to increase the growth of a scientific attitude toward problems of social living.

4. To develop some functional understanding of the major concepts and generalizations of natural science as illustrated in the environment of the community.
5. To introduce the elementary concepts of the machine production and mechanical power that have become an essential part of our culture, and to emphasize the need of a value pattern that will control such factors for human progress.
6. To reveal wider fields of knowledge to the young pupil through:
   (a) reading in selected science areas; and
   (b) a reasonable science vocabulary to facilitate such reading, and desired expression.

Approach:

Material for this section must be arranged with due regard for the maturity level and background information of the class. Obviously only simplified presentations of production methods are feasible. In some communities mining, for example, may be an important industry and a relatively advanced knowledge of the processes involved may be common-place amongst the class. During the selection of topic and inclusive material the teacher should keep in mind three general areas:

(a) the problems of social living involved;

(b) the influence of the natural environment on the people concerned;

(c) the technology involved.

The first two areas are certainly more important to pupils of the elementary school than the third, and should accordingly be emphasized. The problems of social living are, of course, phases of the Scope outline. The selection of some particular social group that operates as a more or less complete unit serves to identify these problems more clearly. Life on Ships and Life in Lumber Camps are illustrations of group living in which science and nature study are of major concern. The natural environment should be explored as completely as possible. Its relationships to the child is immediate and his attention is attracted to the animals, the birds and the natural phenomena around him. In addition to the native environment teachers should not overlook any opportunities offered by zoos, parks, aquariums or similar attractions and projects. The study of technology must be kept simple. The significance of products and the human element involved in production are more important than the actual processes. Motive power, fundamental operations such as heating, washing, rolling, cutting, can be understood but unless care is exercised concepts of technology can easily get beyond the comprehension of these pupils. Many teachers prefer to keep the major science emphasis on Nature Study at this grade level. In such instances particular attention can be devoted to the plant and animal communities that exist in their own locality and in other places in which they have a natural interest. There is ample opportunity in such a study, properly developed, to provide adequate introductions to science learnings.

The activity programme encourages the use of simple demonstrations that are significant to elementary pupils. Careful handling,

careful observation, and careful explanation are essential if outcomes are to be worthwhile and permanent.

Another phase of science activity often overlooked is properly directed reading. Several excellent series of science readers are now available and teachers are urged to make these materials available to their classes for free reading as well as for elementary research and report purposes.

Teachers who feel the need for direction in the selection of suitable topics for this section are urged to consider the possibilities listed here:

1. Life on Ships.
2. Life in Lumber Camps.
3. Life in Mines.
4. Life in Factories.
5. Ivory Hunters.
6. Rubber Gatherers.
7. Story of Flour—(Cotton, Wool, Leather, Paper, etc.)
8. Plant and Animal Communities at Home and Elsewhere.

Teachers are reminded that any of these topics not used at this level may be carried over as suggestions to other sections, particularly Section C, Grade IV.

Major Learnings:

(Life on Ships as a typical selection).

SOCIAL STUDIES:

1. Sailors have distinctive clothing.
2. Living quarters for crew men are often cramped and small.
3. Sailors have learned a signal system with both flags and lights.
4. Ships employ many special safety devices.
5. A ship has a definite system of government for order and control.
6. Sailors are keen weather observers.
7. Midshipmen are boys who are learning to be sailors.
8. Sailors are very fond of singing and story-telling.
9. Many ships are specially equipped to carry particular cargoes.

HEALTH:

1. People will die unless they have plenty of fresh water.
2. Ventilation can be accomplished by means of fans.
3. Ships are kept clean by daily scrubbing and polishing.
4. Ships are neat because everything has a definite place.
5. Ships are painted very frequently to preserve the metal and to keep them clean and attractive.
6. Sailors have special clothing to keep them dry during storms.
7. Sailors are fond of tattoo designs on their arms and bodies.
8. Hammocks make comfortable beds after one is accustomed to them.
9. Every man on a ship has special duties for which he is responsible.
10. Disobedience (mutiny) on a ship is a very serious offence.
    (To be added to by the teacher).

SCIENCE:

1. Stars serve as guides to sailors.
2. Storm warnings are important to sailors.
3. Light houses are built tall to send warnings long distances.
4. Sailors can use the sun to get their directions and their location.

5. The sailor sees many strange fish, all able to live and find food in the water.
6. Sea weeds are plants that can live in water.
7. Old fashioned ships used sails hung on tall masts.
8. Modern ships use steam engines or Diesel engines.
9. Tide are useful to sailors when they are coming into harbour.
10. The compass is a very important instrument to the sailors.

Grade IV

Section A—HOW PIONEERS SETTLED THE NEW WORLD

Purpose:

In a land as young as Western Canada a unit on pioneer life can be an interesting experience. Many evidences of our early settlers remain and classes will enjoy the effort to re-live the days and deeds of pioneer times. Among the various outcomes of such a study the following have a valid place:

1. The children should participate in the romance and adventure of living in a new land. The fact that at this age they respond readily to the appeal of the past can be used to foster ideals that are desirable and lasting. The frontier has played an important part in determining our way of life and boys and girls should learn to appreciate its story. Only the hardy and the resourceful pushed beyond the edge of civilization to seek opportunities of all kinds. Some came seeking wealth, some seeking homes; some came to corrupt, some to Christianize. It was a rough, colourful life where all men met on equal terms. Fur traders in the northern woods, prospectors in mountain valleys, cowboys on the southern plains, Mounties in scarlet, settlers with axe and plow and sod shanties, missionaries and whiskey-traders, all had a share in the stirring story. The West has a rich folk-lore that should be a heritage to every child.

2. The sterling qualities of character that seemed almost commonplace among pioneer people should not be lost to the children who read their story. The fine qualities of initiative, self-reliance and personal courage among pioneers can seldom be matched in history. Today, when individual strength of character seems sometimes buried under collective projects and group activities, the examples of pioneer men and women should not pass unnoticed.

3. Some knowledge of our own province can profitably be introduced at this grade level. If the pioneer group selected for study is connected with Alberta much of the information accumulated may be quite applicable to a contemporary study. While a specific spot (Grade V, Section B) has been selected for a survey of Alberta, every opportunity for understanding our own province should be utilized. Any teacher contemplating a unit involving early days in Alberta should refer to the Grade V cycle, Section B.

4. Since the understanding of present-day living is a constant objective, the strong contrast between pioneer life and modern living should be emphasized. The reliance of the pioneers on the immediate fruits of toil is a complete reversal of the specialized urban living in our cities today. How the same needs we experience today were met many years ago without modern organization and conveniences should be a revealing study for Grade IV pupils.

Approach:

This section is devoted to an increased understanding of our historical background. It should enrich the pupils' sense of time perspective. Care should accordingly be exercised to locate the unit in approximate relationship to other events. The history of our own region is relatively new. For this reason it is probably more desirable to limit Enterprises on western pioneering themes to less mature groups. Abler classes may choose from a wider time range.

The section lends itself to an ample amount of handicraft and manual activity. While these exercises are to be encouraged, teachers should be ready to exercise control and guidance. These manual activities are valuable when they represent the child's conception of some actual phase of pioneer life. They tend to lose that value when they are reduced to manual busywork or long tedious construction jobs.

Most Alberta districts are reasonably well supplied with contacts with or reminders of pioneer days. Community resources should be used for motivating and learning purposes at relevant points. Teachers may find most tales of folk-lore at a vocabulary level too advanced for easy reading by youngsters. Such stories will nevertheless be enjoyed when read by an exceptional reader or by the teacher.

Numerous topics suggest themselves for Enterprises in this section. Teachers will utilize ideas of their own and will devise combinations and variations to suit their own situation. The following are suggestive ideas only:

1. The "Cattle Kings" of Alberta.
2. Early Farming on the Prairies.
3. Fur Trading with the Hudson's Bay Company.
4. Life in Fort Edmonton.
5. The Coming of the Mounted Police.
6. The Story of the C.P.R.
7. Missionary Work in Western Canada.
8. The Yukon Gold Rush.
9. The Habitant of Old Quebec.
10. The Pilgrim Fathers.
11. The Red River Settlement.

Careful wording of the actual title will add to the theme chosen for this section.

Major Learnings:

SOCIAL STUDIES:

1. The offer of free land was a great attraction to immigrants.
2. Towns, cities and villages grew up around trading posts along the rivers.
3. Some missions became centres for towns.
4. Homes were constructed from native materials.
5. Laws were few.
6. Clothing was made by hand.
7. Recreation consisted of dances and parties of various kinds.
8. Many native plants and animals contributed to the food supply.
9. Travel was slow and time-consuming.
10. Pioneers often wasted many natural resources.
11. Hospitality was an inevitable custom.

HEALTH:

1. Since regular medical care was impossible many missionaries practised some medicine.
2. Milk and fresh vegetables were often scarce.
3. Clothing was durable but scarce.
4. Scarcity of soap made cleanliness a problem.
5. Tooth decay meant extraction.
6. Water supply was a serious problem for homesteaders.
7. Outdoor life tended to build good posture.
8. First aid knowledge was very important.
9. Prairie fires were very hazardous.
10. Friendliness and cheerfulness were common attitudes.

SCIENCE:

1. Pioneers depended on animals in many ways.
2. The new land had many beautiful useful birds.
3. Hail storms frequently ruined the settlers' crops.
4. Lightning occasionally set fires.
5. Welding by heat made the blacksmith forge a handy machine.
6. Wagon wheels were "set" by heating the tires in an open fire.
7. Levers were commonly used in homesteading activities.
8. The axe was an example of the wedge.
9. Cultivation of soil increased fertility.
10. Survey problems required accurate measurement.

Section B—HOW WE LIVE AND WORK IN THE MODERN WORLD

Purpose:

The primary purpose of this section is to broaden pupil understanding of contemporary living. The areas of study for this section include those people and countries representing advanced social living. The suggested topics will include many lands of favourable location and development where men have lived in some comfort and enjoyment. Investigation will reveal that in favoured spots on the earth men have been most active in invention and discovery, in advancing social and individual enlightenment, in improving all those conditions we generally lump together as "the standard of living". The improvements they devised have spread by one means or another to other sections of the world, and as a result nearly all of mankind has reaped some degree of benefit.

The basic reasons for the unusual activity of some nations are varied and generally beyond the comprehension of elementary school pupils. But the nature of the improvements, the increased comforts of life, and the means of distributing such benefits can be understood in simplified form. When causal factors are concrete and of an obvious nature they may be included in the expected understandings.

The countries suggested for study in this topic represent the original homelands of most of Alberta's settlers and may be introduced from that angle. The information the class acquires respecting the nations that have contributed to Canadian culture and population is a definite gain. To be most effective the selection and planning of a unit must be worked out by the teacher with due regard for class interest, maturity, and abilities. Reference materials are scarce regarding many countries. Whenever possible visual aids should be utilized for this section.

Approach:

The emphasis of this section lies in the area of modern living. If the section follows a study of pioneer life the contrasting ways of life, separated by 100 years or less, should be comprehended by Grade IV children. There is, however, no obligatory connection between this section and the one immediately preceding it. In a multiple-grade class, for example, this section might be neatly introduced following a detailed study of the home community. Here the relationship would become more comparative than contrasting. An Enterprise from this section should, in effect, create a further acquaintance with methods of living and working in those lands respecting which the class will have only indirect information. The cultures they observe will, in general, enjoy at least some benefits of modern technology, differing from our own daily civilization primarily because of variance in natural influences and in national traditions and values.

One approach that should be used frequently in an Enterprise from this section is through the activities and interests of children in distant lands. The consideration of any country too easily slips into a presentation of problems concerning adult activities in which children have little or no participation. The actions of other children carry a major appeal for children of nine or ten years of age. Furthermore, through a discussion of the role other boys and girls fill, their games and sports, their food and clothing, their school and holidays, the factual information of appropriate consequence can be learned with greater ease.

In preparing an Enterprise from this section, the matter of suitable bibliography should be carefully examined. The possible range of topics is very wide—and in selecting a title the amount of suitable reading material available should be reviewed and checked. The success of a study of modern living in Russia, while potentially a worthwhile topic, might hinge almost entirely on the amount of authentic reading material of proper grade level.

Among the topics that will prove most valuable for this Enterprise will be the various countries and world regions. In some cases certain cities might form the focal point. Some class might undertake a study of Life in the United States, another might select Life in Southern United States, while another would select Life in New Orleans. The list of possible topics is lengthy. Suggestions would include:

1. Continents such as South America or Australia.
2. Countries such as the United States, Great Britain, Russia, France, Germany, New Zealand, Brazil, Argentina, Mexico, China, India, Italy, Norway or Sweden.
3. Cities such as London, Paris, Moscow, New York, New Orleans, San Francisco or Mexico City.

Major Learning:

(**Life in Southern United States** as a typical selection).

SOCIAL STUDIES:

1. Many of the farms are large and are called plantations.
2. Most of the small farms are rented by negroes.
3. Negroes were first brought to the South as slaves.
4. The Mississippi is one of the largest rivers in the world.
5. River transportation is cheap.

6. The entire country was once covered with pine forests.
7. The South contains many nationalities: French, Spanish, Mexican, Negro, "Yankee".
8. Negro music is famous all over the world.
9. The Negro race has produced many famous singers and athletes.
10. The chief crops have been cotton and tobacco.

HEALTH:

1. Children are often required to do hard work in the cotton fields.
2. All clothing is made of cotton.
3. Children on the farms go barefoot most of the time.
4. Hot weather during the summer makes exercise and work difficult.
5. Preservation of food is difficult except for those people who can afford refrigerators.
6. Beriberi and pellagra are common diseases.
7. Swamp lands are unhealthy.
8. Mosquitoes carry yellow fever.
9. Tornadoes and floods take many lives.

SCIENCE:

1. Rivers wash away soil after the forest is cut.
2. The soil is carried toward the sea and some of it forms a delta.
3. Dams help prevent floods.
4. Re-cropping with the same crop wears the soil out.
5. In swamps we find plants able to live in water.
6. The mule can work in hot weather better than the horse.
7. Peanuts grow under the ground like potatoes.
8. Cotton must be picked by hand from the "boll".
9. Sugar cane looks something like corn.
10. The sap of the pine tree gives us turpentine.

Section C—HOW TRADING IMPROVES OUR WORLD

Purpose:

One of the most tangible bonds between Alberta communities and the rest of the world, particularly lands outside Canada, is the exchange of goods that make up the trade and commerce of the world. While physical necessities (food and clothing) are not vitally affected, few phases of modern living are not touched by the traffic activities. To the child whose interests in other peoples are thoroughly aroused a study relating to commercial interchange can be most stimulating. An Enterprise developed around this theme has many educative possibilities.

1. Instruction in global geography can be introduced on a definitely planned basis and on a fairly comprehensive scale. Commerce reaches to far-away places, crosses all political boundaries, deals realistically with global distances, utilizes all available technology, adjusts to geographical environment, and to a large degree disregards racial and national controversy. Distance, climate, waterways and mountain barriers in all parts of the world may have direct consequences in our daily living habits.
2. The interdependence of modern people as expressed in a world-wide exchange of goods and products can be effectively illustrated through a study in this section.
3. The problems involved in judicious personal buying, consumer

education if you like, can have some real significance to children. This section would seem to offer opportunities for some such instruction in its proper setting. The matter of relative need, of seasonal demand, of mechanized handling and processing can be discussed in an elementary fashion. The factors that go to make up a fair price, labour, raw material, transportation, etc., can be considered with respect to goods of various types.

4. Modern living involves an understanding of the methods and results of modern production using technical power, improved materials and specialized labour. Appropriate illustrations in this section can expand such concepts and understandings. The story, for example, of how we get a suit of clothing introduces some consideration of the basic place of agriculture, the productivity of semi-automatic machinery, the matter of design and style, the problems of factory labour and piecework, the function of salesmanship and advertising and other understandings related to social living. The child can realize that the specialization of modern production methods contributes much to comfortable living but raises problems that cannot be dismissed lightly.

5. The concept that ideas and services have a marketable value comparable to tangible goods may be new to many Grade IV pupils. Examination will reveal that a large share of the cultural phases of living as well as a good part of the physical phases are enjoyed only because of these less tangible factors. Any discussion in this area opens up the question of good taste, personal value patterns, and the effect of individual choice in determining the collective cultural values of our society.

Approach:

This section can tie in closely with the study of the home community or of our home province of Alberta. The concepts of geography should be developed through the use of the globe, and should feature the location of Canada and Alberta. Major attention should centre on the relative placement of land and water, upon the usefulness of the ocean for transit rather than as a barrier, the location of the major temperature zones of the world, their typical climate and the use of their products in our own community. Basic terms of reference such as North and South Poles and Equator can be established through usage.

An introductory study of Alberta through her resources and products can be linked to this section if the teacher so desires. While Grade V, Section B, deals specifically with Alberta, supplementary and preparatory material should be used at other points. Teachers are advised to consult the above-mentioned section in their preparation for the present topic.

The Scope areas most naturally concerned in an Enterprise from this section will be those dealing with Earning a Living. Some attention should, nevertheless, be directed to ways in which government, conservation, art, education, etc., are affected by our commercial relations with other parts of the world.

In selecting typical products for study, the available source materials and bibliography should be carefully checked. Important items of consequence to children such as food (bananas, cocoanuts,

spices, rice, oranges, etc.) and clothing (silk, linen, rubber, shoes, suits, etc.) can be balanced by export items of importance from Alberta—wheat, sugar, meat, etc.

The motif of the Enterprise should suggest an approach broad enough to introduce a variety of activities. These suggestions might be considered typical:

1. Stories from the shelves of a country store.
2. Stories from a railroad car (or a harbour wharf).
3. A child's journey around the world.
4. Ships of Canada.

Major Learnings:

(**Ships of Canada** as a typical selection).

SOCIAL STUDIES:

1. International buying must be done with goods.
2. Trading goods helps to prevent wastage.
3. Slow transportation is usually cheaper than fast transportation.
4. Goods are handled by special loading and unloading machinery.
5. Liners are luxurious ships for tourists and other passengers.
6. Most of our jewelry is brought from other lands.
7. Ships and cargoes are protected by insurance.
8. Many British moving pictures help to buy our wheat and lumber.
9. Crowded countries always trade finished goods for food.
10. Farming countries trade food for other goods.

HEALTH:

1. Meat is lacking in many diets because it is expensive.
2. Meat substitutes create many strange foods in the crowded Far East.
3. Fish is a good meat substitute.
4. Alberta children can usually have a balanced diet.
5. All diets need large amounts of starch foods.
6. Wheat is one of the most valuable foods in the world.
7. Some diseases are spread through careless food handling.
8. Flies are dangerous enemies in food handling.
9. Many medicines and much health equipment come from other lands.
10. Canada has many surplus goods to sell to other people.

SCIENCE:

1. Freezing temperature is 32 degrees Fahrenheit.
2. Fruit orchards are sometimes protected by fires at night.
3. A hothouse produces ideal growing conditions.
4. Rice grows in a very wet climate.
5. New machinery makes food cheaper.
6. Wheat can be made into many products.
7. Fertilizers are added to soil to improve plant growth.
8. The torrid zone has warm weather all year.
9. Mountainous countries usually raise timber.

Section D—HOW BRAVE AND WISE MEN HAVE HELPED OUR WORLD

Purpose:

The progress of civilization is a direct result in large part of the efforts of a relatively few people. These are the pioneers who have pushed ahead in every field of industry, education, literature, fine arts,

politics, commerce, etc., to prove new and better ways of living to their fellowmen. When we think of social betterment we find ourselves repeatedly referring to some person whose labours have given something of special value to our knowledge, our thoughts, and our actions. Recognition of their contribution in no way diminishes the genuine worth of millions of others who have worked long and earnestly, without fame or mention, to consolidate these gains for mankind. Indeed, they are but the selected representatives of men everywhere who have put the common welfare ahead of self-interests. This section is included in the belief that some organized study of the lives of selected outstanding men and women can be a genuinely educative and enlightening experience for children. In their ambitions the needs of society are manifest, in their actions the values of society are illustrated, in their accomplishments the future of society is shaped.

Nor is such study without psychological foundation. Children at this age have a natural appetite for adventure, excitement and "hero worship", as is witnessed by comic books and radio serials. The school can make a conscious appeal to this relish for adventure through the study of the lives of great men and women whose accomplishments have involved great courage, sacrifice, feats of strength and high adventure as stirring as any fiction.

An additional outcome from good biographical study lies in the possibility for character development. The essential basis of individual preparation, the dignity and worth of real labour, the necessity for deep enduring loyalties, the success of persistence and patience, the motivation of high ideals are intangible values that to juvenile minds require illustration and concrete examples. In the lives of notable men and women these virtues can be seen in situations that awaken the imitative admiration of childhood.

Nowhere have the "heroes" of the past been more abundant than in the field of science. Always the critical needs of humanity have been a challenge to scientists. Repeatedly they have devised solutions that were beyond expectation in both performance and implication. Their problems have been immediate and specific, their results have been spectacular and applicable, their lives have in many cases been so comparatively recent that they can maintain a large share of the attention in this section.

Another anticipated outcome of scientific biography should be some understanding of what is commonly referred to as the "scientific method" and the "scientific attitude". In handling the tangible and often inanimate materials of science, scholars have outlined certain techniques and fostered intellectual objectivity that can be of surprising worth in any field of endeavour. It would be a grave injustice to both scientists and young students to present the "scientific method" as a series of pre-arranged "steps" or a matter of repetitious routine, nor is the "scientific attitude" lacking in imagination and intuition. In fact "the working scientist brings to bear upon these problems everything at his command—previous knowledge, intuition, trial and error, imagination, formal logic, and mathematics—and these may appear in almost any order in the course of working through a problem".[1] Biographical study will surely bear out the assumption that scientists are no more formalized and no less concerned with human values than are other people.

1—General Education in a Free Society, Report of Harvard Committee, 1945, p. 158.

Approach:

While this section has been introduced primarily to offer some acquaintance with men of science there is no necessity to limit biographical studies to scientists alone. Outstanding people whose contributions can be understood by children and whose lives and work are exemplary might be included regardless of the field in which they worked. The teacher's own interests will appropriately find some reflection in the nature of the selected studies. Many pupils with special knowledge and interests can offer suggestions valuable for class study. A definite effort should be made to include as many Canadians as possible in the interest of national loyalty and respect. Some teachers may in fact wish to limit a study occasionally to outstanding Canadians. In any case the ideals of free exchange of scientific information and the broad humanitarianism of the best type of science and citizen should not be neglected.

The list of possible candidates for study should be selected with the problems of suitable bibliography and resource materials in mind.

Major Learnings:

(Information for this section will naturally centre about the lives of the men and women selected for study. Two typical selections are illustrated).

DOCTOR FREDERICK G. BANTING:

1. Doctor Banting's boyhood on an Ontario farm was very much like that of other boys.
2. His childhood ambition was to be a doctor even though his parents hoped he would become a minister.
3. His college work showed him to be a careful worker and very persistent in experimental study.
4. Dr. Banting left college to enlist in the army where he worked in the hospital and was later sent back to college by the army.
5. His idea of finding a medicine, later known as insulin, came after reading what other doctors had done for diabetes.
6. His extraction of insulin required a great deal of experimentation with animals and had to be repeated many times.
7. Insulin replaces certain fluids in the blood and aids the digestive system in using sugar properly.
8. All the profit from the sale of insulin has gone to help medical research at the University of Toronto and other medical schools.
9. Doctor Banting was rewarded with great honour and recognition but he never became rich.
10. Doctor Banting loved to travel and to paint pictures which he did very well.
11. Doctor Banting was killed in 1941 while doing research work with the R.C.A.F.
    (To be added to by the teacher).

WRIGHT BROTHERS:

1. Orville and Wilbur Wright grew up at Dayton, Ohio.
2. Their boyhood hobbies were kites and toy flying machines.
3. They read and studied all that other men had written about flying.
4. They built gliders and experimented with many different types.
5. The United States Weather Bureau supplied them with information regarding suitable spots for experimentation.

6. At Kitty Hawk, North Carolina, they made their first attempts to fly.
7. They invented a wind tunnel to help them study gliders and flying machines.
8. In 1903 they made the first real airplane flight which lasted only three seconds.
9. By 1904 their airplane could fly for five minutes, and by 1908 it flew for one hour.
10. Their careful experimentation, thorough study, and fine workmanship prevented many serious accidents in pioneer flying.
(To be added to by the teacher).

GRADES V-VI

Point of View:

These years are marked by a definite rejection of the conformities and conventions that adults find so satisfying. Whereas past digressions from "normal" behaviour have been largely on an individual occasional basis, divergences at this age seem almost an organized mass movement. Psychologists refer to it as the "gang" age and in it find definite behaviour changes to be normally expected occurrences. Actually adult control is still generally of a protective nature and adult admonition on a "you-are-only-a-child" basis. Rejecting over-protection, the child is inclined to fill these years between childhood and adolescence with organizations, standards and interests acceptable only to his own age group. The "gang" is apt to be a little tightly closed clique with an attitude of intense rivalry towards other "gangs" and almost perfect imperviousness to adult participation. This social grouping will exert a profound control that may frequently become the respair of the home and the school.

Coupled with his gang affiliations the boy of this age will resort to all manner of boasting, teasing and showing off with exhibitions of supposed fortitude, strength and cleverness. Concern over grace and courtesy will sink to a low ebb. Consequent problems of "discipline" will arise to tax the patience of the teacher and to provide the basis for secret sympathy from all "the fellows". Girls do not usually exhibit a behaviour change to the same degree as boys, which seems only to add to the temporary emotional demarcation between sexes. But body and soul, these boys are brothers of Tom Sawyer and Huckleberry Finn and remain so until maturation carries them off into the unexplored area of boy-girl interests.

The school programme should, in so far as may be reasonable, adjust itself to recognize the directive forces and feelings associated with this age group. Committee and group work will be readily accepted provided choice of grouping is left in some degree in the hands of the children themselves. Teacher efforts to select consistently group personnel, particularly that of mixed groups, may easily create antagonism. When groups have been organized delegation to them of some direct responsibility will be necessary to satisfy the need for self-assertion and will at the same time contribute to individual character growth. The strong spirit of rivalry may be used judiciously. Any comparisons must be kept on a perfectly impartial basis. Ridicule and disparagement before the group should be avoided at all times. School activities may effectively include those activities that appeal to boys; manipulation of elementary science apparatus, collection of specimens, excursions, physical exercises of some degree of difficulty. Content material should be selected for its appeal to the sense of adventure, action and romance. Teachers should remember that while these juvenile groups may resist adult participation within their select circle they are still influenced to some degree by hero worship. Through story and study the heroes of the past may exert directive guidance, and Robin Hood and Radisson become temporarily more appealing and influential than contemporary adults. Proper opportunities should accordingly be maintained for biographical reading concerning the lives of admirable men and women whose deeds in legend or in fact bear a moral for modern living. Co-operation of the school with such worthwhile movements as Cub, Scout, and Girl Guide groups may be feasible in some communities. The school should

accept some direct responsibility for providing wholesome interest areas for the group organization and the group expression that is so attractive to these students.

GRADE V

Section A—HOW CANADIANS ESTABLISHED THEMSELVES FROM SEA TO SEA

Purposes:

This section aims to emphasize the historical concepts for the Grade V year. The discovery of the New World and the stories of the intrepid adventurers who explored it from shore to shore make one of the most thrilling chapters in history. The popularity of the theme is reflected in its frequent use in Enterprise classes. To boys and girls of this age the men who mapped the new land are heroes indeed. From their lives come lessons valuable today.

1. The matter of historical and geographical placement comes up for repeated consideration. The geography covered is the American continent. The history covered is simple narrative reaching back to the fifteenth century. The section offers particular opportunity to establish the movement of time as a concept similar to spatial movement with which children are naturally better acquainted.
2. The concepts of historical fact must be accompanied by some degree of emotional allegiance. Loyalty is more than a knowledge of history and geography. To the Grade V child these pages of history should have an appeal that will be basic to an abiding pride and love for Canada.
3. Some appreciation can be aroused for the ideals of personal freedom that have attached themselves to this land since its first settlement. In an age in which the pattern of change has been so demonstrably flexible the retention of a value pattern featuring individual liberty above all else is the prime consideration.
4. The age of discovery was shared by men of many nations, and the heroes of history represent a cross-section of nationalities. To know the debt we owe to men of all lands develops an attitude of respect for people of all countries. Along with this tolerance may come an understanding of the devotion and the enthusiasm for a cause or a belief that supported the men who pushed their way across unknown seas and lands.
5. Some knowledge of the ways of living of long ago is a valuable aid to better living today. This section offers more insight into the background of our culture. The story of exploration is coupled with the expanding knowledge of science and its application. The growth of government, of trade and commerce, of population and industry, are all parts of the virile health of a new country. To learn how these people accomplished their goals for better living offers guidance in modern problems.

Approach:

The emphasis upon historical content can be accomplished only by a broader approach than through an exclusive list of Canadian explorers. The pattern of the ages of discovery must include European adventurers searching for new wealth and easier access to the Far East. The resultant efforts of the Portuguese, the Spanish, the French,

the Dutch and the British combined to widen the knowledge of the new land and to spur men to reach further into the wilderness.

Much of the Enterprise work will be given over to the narrative of individual adventurers. Be sure that the pupils become familiar with the significant figures who were intimately associated with exploration of other sections of the New World outside Canada. Their work serves to place Canadian discoveries in a truer perspective. Special attention should of course be allotted to men whose journeys covered Canadian soil and streams.

Along with biographical development should be some study of the motives which sponsored the discoverers. Desire for wealth, in gold or furs, for new homes, for religious freedom, for the legendary North-west Passage, or for pure adventure reveal human qualities that rouse sympathetic response in modern readers.

A close accompaniment of globe and maps will make this section rich in geography teaching. Careful attention should be given to the physical features and to the distance relationships that were so vitally important long before political claims were ever considered.

The potential list of men who might serve as significant figures in an Enterprise from this section is a long one, and careful sampling should present a representative picture of the exploration of our western continent. Some grouping respecting period or area is generally advisable, and detailed study within the unit should reveal the relationship between the various individuals and groups and the movements they represent.

The following groups and listings are suggestive only:

1. Early explorers: Leif Erickson, Marco Polo, Da Gama, Columbus, Cabot.
2. French explorers: Cartier, Champlain, La Salle, Frontenac, Talon, Marquette and Jolliet, Verendrye, Radisson, Groseilliers.
3. Southern explorers: Cortez, Pizarro, Balboa, Coronado, Ponce de Leon, Magellan, Drake, De Soto.
4. English-American explorers: Raleigh, Gilbert, Standish, John Smith, William Penn, Stuyvesant, Lewis and Clark, Bridger, Astor.
5. Western explorers: Vancouver, Hudson, Kearne, Mackenzie, Pond, Kelsey, Fraser, Selkirk, Riel, Strathcona, Father Lacombe, Reverend McDougall.
6. Polar explorers: Franklin, Frobisher, Davis, Stefanson, Wilkins, Perry, Amundsen, Byrd.

Major Learnings:

SOCIAL STUDIES:

1. Early explorers were looking for a water route to China.
2. Canada's first explorers and settlers were French.
3. The early homes were built along river banks.
4. The fur-trade "paid" for Canadian exploration.
5. The Hudson's Bay Company dominated the exploration of the Northwest.
6. The beaver is an appropriate symbol for Canada.
7. Settlers were discouraged by the fur traders.
8. Canadian exploration was not greatly hindered by the Indians.
9. The Northwest Passage is of little real value.
10. Rivers were the natural roadways for exploration.

HEALTH:

1. Spices were once a very important part of diet.
2. Scurvy is caused by lack of balanced diet.
3. Vitamins are vital to health.
4. Contamination of water results from "civilized" wastes.
5. Smallpox was a dread disease when vaccination was not available.
6. "Fountain of Youth" was a health superstition.
7. Heavy protein diet was suitable for heavy labour.
8. Concentrated foods make modern exploration much easier.
9. Enthusiasm is a good doctor.
10. Contagious diseases are rare in polar explorations.

SCIENCE:

1. The stars served as navigation points for early sailors.
2. The sun was an important aid to travellers.
3. Sea fog and storms are caused by warm air meeting cold air.
4. Modern sailors employ many safety devices.
5. The final proof that the earth is round was circumnavigation.
6. Early sailors had many superstitions regarding the earth.
7. The winds over the earth blow in a definite pattern.
8. Early sailors were skilful at using the force of the wind.
9. Plant life and animal life depend upon rainfall.
10. Many new food plants were found in America.

Section B—HOW ALBERTA PROVIDES FOR HER PEOPLE

Purpose:

This is another section devoted to a fuller understanding of modern living in our own area with all the benefits that science and education have thus far been able to provide. Its definite object is to acquaint pupils more fully with the people, the customs, the industries, the resources, the traditions and the possibilities of our own province. Emotional attachment to our home region is a natural human attribute. The schools should take an active part in promoting some deserving pride of Alberta in the mind of every child. That esteem should spring from a sense of worthwhile accomplishment and from an appreciation of the distinct promises and possibilities of our land and people.

The fact that Alberta ranks as one of the most fortunate areas of the world from the standpoint of natural resources has been established beyond question. The mineral resources, the soil fertility, under either natural conditions or irrigation, the wealth of forest and streams combine to create untold opportunities for material improvement. Our citizens should be justly proud of what this province offers, and duly cognizant of the obligation to develop such resources intelligently. But faith in Alberta must stand on a broader basis than realization of natural wealth.

We must avoid at all costs the fallacy of believing that Albertans will be a happy, prosperous people simply because they live in a richly endowed land. Abundance in itself is no guarantee that people will benefit and prosper thereby. Improper management can bring discontent and dishonesty. The basic considerations lie with the people themselves. Their ideals, their goals, their personal and collective behaviour will determine whether or not this province develops in a purposeful rational fashion. School children should be acquainted with the people of Alberta and with what they are doing to bring the

fruits of labour and of peace into their homes. They may be proud of the progressive steps these people have made, in our modern cities, on our fine farms, in our productive mines, in churches, in schools, in government. Most of all they should realize that the hard work and the sound judgment of our pioneers developed this province in less than fifty years. Continued work and loyalty to ideals are the only safeguard for happy living and cultural progress in this province.

Approach:

This section should represent a considerable share of the year's Enterprise activities. The general opinion among Alberta educators is that in the past insufficient attention has been given to this important study. While a definite responsibility is assigned to this section for a survey study of Alberta, the introduction of information and investigation concerning our province is not thereby excluded from other sections of the Sequence. It is, in fact, highly desirable that some study of Alberta be presented at other points. The amount of information available is too great to achieve full permanent comprehension in any one attempt. Teachers will accordingly be watchful to note other sections in which some good learning respecting Alberta as a province can be introduced. The development of such concepts, beginning even as low as Grade III will serve as a sound basis for a more complete study at this level. If the teacher feels it advisable some activity directly related to Alberta can be used every year. Section D Grade III can deal with some production of raw materials and natural wealth in our province, Section A Grade IV can emphasize Alberta pioneering, Section C Grade IV can deal with Alberta's place in production of goods for other people. Section B Grade VI can review Alberta as a component part of Canada. Section D Grade VI will again require repeated reference to industrial development as illustrated by our own province. Teachers are accordingly encouraged to introduce appropriate material at these or other places. However, even with these varied opportunities, it is felt that some inclusive study of modern living in Alberta can be a desirable experience for all classes, and should be provided here.

This section should prove a direct continuation from the study of the local community from the previous cycle. What has already been said regarding Approach, Grade III Section A, might well be reviewed at this point for application to this study. The class should emerge with some knowledge and appreciation of Alberta's romantic history, geography, resources, industrial, social and cultural growth. They should realize that as we widen our community horizons the more fully and completely are we working together to satisfy the needs that arise in our present day living.

The immediate approach to this Enterprise can be varied to suit local conditions. News events, provincial government activities, industrial growth, a visit to the Legislature, a talk by a local M.L.A., a visit by a class member to another section of the province, are all introductory items that might focus attention upon Alberta as a suitable unit of study.

Major Learnings:

SOCIAL STUDIES:

1. Alberta's population has undergone great increase since 1905.
2. A wide variety of industries now exist to offer a livelihood to Alberta's people.

3. Fishing and hunting attract many people to our province each year.
4. Our natural resources are controlled and protected by our provincial government.
5. Alberta contains more coal reserves than all the rest of Canada.
6. The Banff School of Fine Arts is a unique cultural development.
7. Alberta's large school divisions were the first of their kind in Canada.
8. Paved highways now connect most of our cities.
9. Edmonton serves as the base for most of the activities of the North.
10. The development of irrigation is most important to agriculture in the South.

HEALTH:

1. Highway signs are erected to prevent traffic accidents.
2. Crippled children from all over Alberta are helped by the Junior Red Cross.
3. Free treatment of tuberculosis is provided at Keith Sanatorium.
4. All dairies and creameries are inspected regularly.
5. Health units provide examination and preventive treatment for many school children.
6. All cities have milk pasteurization plants.
7. Rural electrification projects can have a direct effect on rural health.
8. University of Alberta has a fine medical school and the only dental school on the prairies.
9. The Department of Health offers many services to the people of the province.
10. Certain diseases such as Rocky Mountain fever have been given definite attention by the Alberta government.

SCIENCE:

1. Climate depends on latitude, altitude, wind systems, oceans and mountains.
2. Soil erosion by wind is an important farming problem in Alberta.
3. Crop rotation is an essential feature of Alberta agriculture.
4. Oil was likely caused by bacterial action ages ago.
5. Many of Alberta's native plants can live in semi-arid regions.
6. Plant colonies can be found in every habitat.
7. Some farm crops are perennials.
8. Dams and reforestation preserve water resources.
9. Airplane skis work because of reduced friction.
10. Our long summer days are caused by the tilt of the earth.
11. Mosquitoes live and breed around lakes and slough water.

Section C—HOW GLOBAL PATTERNS AFFECT US

Purpose:

The trend of world events over the past ten years should stand as complete justification for an emphasis of global geography at the earliest feasible grade level. The purpose of this section is to build up basic concepts and increase detailed knowledge of the world as a whole. The basic concepts involved might be classified in two groups:

(a) understandings concerning the facts of physical geography; and

(b) understandings concerning the relationship between phyical geography and the activities of men.

While the second of these outcomes is admittedly the more significant,

the fundamental place of the first can never be dismissed lightly. It must accompany the second, and indeed serves as a means to achieve such understandings.

If the problems of geography have been properly presented in the lower grades the children of Grade V already realize in some degree the relationship between the things men do and the regions in which they do them. To promote further this desirable accomplishment this section should attempt to:

1. Increase the fund of information concerning the nature, size and placement of the main land masses of the world, with particular emphasis upon the strategic alignment across the Arctic regions.
2. Impart specific information regarding our own continent and our own country.
3. Delineate clearly the factors involved in determining climate—altitude, latitude, ocean currents, winds, etc.—and relate closely the effects of climate upon human activities and natural resources.
4. Establish some concept of the distribution of human beings on the earth's surface, and discuss the most obvious reasons for observed grouping.
5. Introduce more opportunities for the use of maps and facilitate map reading.
6. Impart some knowledge of the major geographical features of each continent—mountains, rivers, deserts, etc.—and discuss their relationship to man's activities, particularly transportation and migration.
7. Illustrate the resourcefulness of man in establishing himself in practically all sections of the globe with some degree of comfort and permanency.

Approach:

This section tends to break away from the pattern of selected social situations that characterizes this Sequence. This variation is acceptable on the thesis that the soundest possible understandings of global geography are necessary for sound thinking on local, national or international problems. The ten items of the Scope are not abandoned, even temporarily, but are to be applied to a broader view than used previously. **They represent the normal activities of men, and the primary responsibility of modern geography teaching has to do with the relationship between activities and environment.** The Scope accordingly still offers guidance for investigation and discussion in geography teaching. In considering this basic relationship just mentioned attention should be drawn to:

(a) the limitations natural surroundings place upon man's activities; and

(b) the constant activities of men to overcome these limitations.

The story of civilization has been marked by the constant improvement in man's expanding control over natural phenomena.

From this approach it can readily be appreciated that, for these grades, political boundaries and sub-divisions should be minimized. The physical, climatic and social features take precedence, and national boundaries remain for little more than convenience of location.

The use of maps is to be encouraged, with due warnings respecting the erroneous impressions that may accompany flat maps of all kinds. Reference to the globe should be sufficiently frequent to clarify any

misunderstandings of flat projections. It should be noted that the main point of this instruction should go beyond **how to use maps** to include the widest purposeful **use** that can actually be made of them. A word should perhaps be said regarding map reading. Standard symbols, markings and colors have been established to denote physical features. These should be learned and used consistently. Maps should be limited in the amount of information they present for elementary pupils. The only justifiable information on a map beyond that relevant to the immediate study should be features that facilitate placement and identification. It should be noted that commercial map companies have recognized this need and are publishing maps and globes admirably suited for elementary school uses.

Finally, care should be used in selecting illustrations and in setting up any essential definitions. Formal definitions too frequently consist, from the student's viewpoint, of substituting meaningless sentences for meaningless words. Make sure that definitions are limited, purposeful, and well-illustrated.

Some suggestive concepts are listed here. They are in no case specifically obligatory, and are included solely for teacher guidance.

1. The continents of the world—their names, shape, placement, relative sizes, major climatic and topographical features, distribution of population.
2. The oceans of the world—names, placement, effect on human activities.
3. Major islands of importance—(in connection with continental study).
4. Terms of topographical reference—island, ocean, continent, pole, equator, isthmus, peninsula, coast line, bay, gulf, range, pass, plateau, etc.
5. Major rivers of the world—two or three on each continent that have most influence with respect to human living.
6. Major mountain ranges—from standpoint of influence on human behaviour.
7. Main farming areas of the world—main forest areas—main grazing areas—main mining areas—main industrial areas.
8. Prevalent wind systems of globe—in relation to discussion on climate.
9. Seasons and eclipses (for advanced groups only).
10. Earth's place in the universe—sun, planets, moon, stars, etc.

Major Learnings:

SOCIAL STUDIES:

1. Prevalent winds were influential factors in early voyages of exploration.
2. Navigable rivers provided highways for Canadian explorers.
3. Ocean currents have a direct effect on temperature and climate.
4. Forests prevent floods and soil erosion.
5. Mountain ranges are frequently used as boundary lines.
6. River valleys have good soil and generally produce heavy crops.
7. Icebergs create real hazards for ships and sailors.
8. Large cities are frequently situated near the mouth of a navigable river.
9. Famous health and pleasure resorts are frequently located in mountainous areas.

10. Many beautiful songs and poems have been written about rivers, lakes, mountains and the ocean.
(To be added to by the teacher).

HEALTH:

1. Temperate zones permit vigorous work and exercise.
2. Frigid zones present serious food and diet problems.
3. Tropical climates foster many peculiar diseases.
4. Boys and girls grow up early in tropical climates.
5. Many tropical diseases are carried by insects.
6. Mountain people find avalanches a hazard to safety.
7. Water supply is an important consideration in the location of cities.
8. Floods create many health problems.
9. Humidity is an important factor in health.
10. Ocean beaches used for swimming and sun bathing improve health standards.
(To be added to by the teacher).

SCIENCE:

1. Jungle growth results from steady warmth and heavy rainfall.
2. Desert plants have ways to conserve moisture.
3. Good fishing grounds result from shallow water where plants grow well.
4. Herbivorous animals must find plant food.
5. Carnivorous animals live on other animals.
6. Plant food is made only through the energy of sunlight.
7. Rich soil contains humus from former plant and animal life.
8. Fossils in stone reveal information about life long ago.
9. Many secrets of history can be learned from layers of earth and rings of tree growth.
10. Glaciers are important soil-making agents.
(To be added to by the teacher).

Section D—HOW SCIENCE HAS AFFECTED OUR CULTURE

Purpose:

The importance of science in modern life can scarcely be overstated. Every curriculum must be concerned with the emphasis and nature of the science it includes. Even though the major emphasis may centre on social organization and individual behaviour the influence of science is still of prime importance. The case has been well stated elsewhere:

"Every unit or topic in social studies involves science. Transportation is a major social activity, but its modern development involves ten thousand applications of scientific principles. Such is true also of communication, the provision of shelter, the manufacture of clothing, the processing of food, the furnishing of entertainment, the generation and distribution of electrical power and light. Conservation of health, life and natural resources are significant human purposes achieved through the applications of science. Every important social activity is permeated with science. Young people can not grow into an understanding of social life without simultaneously studying the possibilities and limitations set by science.

"Similarly, every unit in science involves social considerations. The study of birds, plants, animals, insects, magetism, electricity,

weather or any other science topic is superficial and misleading if it fails to include the implications of the subject for human welfare. A major source of present-day difficultiies is our facile application of scientific principles, in industry and otherwise, without thinking through their social effects. Science must be humanized; science study in our schools must be humanized."[1]

The entire nature of western culture has been dominated by the rapid growth of science and technology. The pace shows no sign of slackening. Indeed the demand for scientific improvements appears limitless. Our whole process of social living and social progress is fused with the multiplication of needs that accompany scientific invention. The internal combustion engine led to the automobile which led in turn to the exploitation of the oil-field, the network of highways and service stations, the inveterate tourist, suburban living, assembly line production, militant labour organization, increased accident tolls. These factors have in turn created new demands, new inventions, new conditions of living.

The whole purpose then of this section is to impart some knowledge and appreciation of the place of science in modern life with its possibilities for both good and evil.

Approach:

This section is a departure from the "social group" technique in favour of selected "themes" that carry on through a variety of situations. In handling this type of Enterprise teachers are reminded that: (a) social location is essential in developing an emphasis on the social influence of scientific progress, and (b) the inter-relationship of the theme and the Scope areas should be kept in mind. For example, the Story of Writing will link throughout with problems of education and artistic expression; the Story of Travel will touch food problems, recreational activities, government, etc.

The list of possible themes for Enterprises that might be considered should include:

(1) The Story of Writing.
(2) The Story of Medicine.
(3) The Story of Travel.
(4) The Story of Messages.
(5) The Story of Money.
(6) The Story of Time.
(7) The Story of the Airplane.
(8) The Story of Building.

Major Learnings:

(The Story of Medicine taken as a typical selection).

SOCIAL STUDIES:

1. Unsanitary living conditions have always favoured the spread of disease.
2. Quarantine laws are intended to prevent the spread of disease.
3. All governments concern themselves with health laws.
4. Some races appear to have no immunity against new diseases.
5. Great epidemics become national disasters.
6. Many universities first started as medical schools.
7. Study for doctors requires at least seven years in university.
8. Nursing first began as a profession during the Crimea War.

1—Teachers' Guide to Child Development, California State Department of Education, page 89.

9. Public contributions such as cancer funds assist medical research.
10. The Red Cross is an international health organization.

HEALTH:

1. Many disease germs are carried by the blood.
2. The body can produce its own immunization.
3. Artificial immunization has nearly eliminated many diseases.
4. Harvey's discovery of blood circulation was very important.
5. Most disease germs enter the body through the nose or mouth.
6. Many disease germs are carried by food and milk.
7. Pasteur first verified the germ theory of disease.
8. The causes of some diseases are still unknown.
9. Every part of the body is subject to attack by some disease or other.
10. Insanity is a type of mental disease that may have many causes.

SCIENCE:

1. Experimentation on animals has been very helpful in medical practice.
2. Germs are actually tiny forms of life that grow and feed and die.
3. The microscope is a most useful instrument to doctors.
4. Blood can be preserved for future medical use.
5. Germ cultures can be grown in laboratories.
6. Many plants have medicinal values.
7. Sterilization means the killing of all disease germs and can be done by heating.
8. Many drugs have been manufactured as medical aids.
9. Medical men use scientific methods in all their research.
10. Many superstitions still exist respecting the cure of diseases.

GRADE VI

Section A—HOW MEN LIVED AND WORKED THROUGH THE AGES

Purpose:

This is the final section of the elementary programme devoted primarily to history. The story of the past can make two major contributions to contemporary living. The first lies in the wide range of examples and precedents it offers in its review of situations whose elements and circumstances parallel or resemble the modern scene. The second value lies in the greater understanding of modern problems derived through some insight into their origin and course to date. While the elementary pupil can scarcely be expected to evaluate such goals by himself, the elementary teacher should be fully aware of the implications they may have for his lessons. In the meantime the Grade VI pupil should be able to gain some degree of satisfaction and improvement through the following outcomes:

1. The universality of the problems of the Scope should become more impressive. The field of acquaintance with other societies has broadened to the point where persistent problems of living tend to appear as definite lines around which recurrent generations have centered the efforts of their day.
2. In the struggles for improved living, the place and magnitude of technology and mechanical power have emerged. The expansion of controllable energy has gone far beyond the dreams of early inventors. The impact on society is visible even to children. The

consequences have not been all happy ones, but the fault does not lie in mechanical imperfections.

3. The issue of human values is crucial in every society. The child is not too young to realize that what men think controls what they do—or do not do. He can understand in an elementary way the place religion plays in civilization, and what the church has meant to men. He can see how the ideal of individual freedom has struggled for expression. He can discuss the use of schools and the aims of education. He can see a heritage of art, drama, and music accumulate through the ages. History can begin to teach its fullest lessons, provided the teacher has already partaken of that message and is ready to assist in its declaration.

Approach:

The narrative element should predominate in history teaching throughout the elementary school. The story of other times should be a fascinating one, but it must have the same elements as any other well-told story—some plot, some characterization, some action, some climax. The people who move through it must be alive, their problems must be intelligible to children, and they must undertake some plausible course, they must reach some end. If the historical concepts for elementary schools can be reduced to these terms history becomes an appetizing, enriching experience for the pupils. The tasks attendant upon the selection and preparation of materials of this type will pay dividends in learning and retention.

The primary intent of this section is to present some review of the social development that has led up to our western civilization. The field is obviously so extensive that very careful selection and simplification must be arranged. This reducing process will apply to both topic and treatment. Skilfully done it should leave an essentially sound core of subject matter of an appropriate nature. In this process of selection the teacher may follow one of two plans:

1. Some single era or social situation of consequence may be given major emphasis. In this instance some definite relationship should be established between the special area and subsequent happenings.
2. A wider approach may link several successive situations into logical sequence. The cumulative approach should deepen an understanding of progress to modern status. In any treatment covering a succession of social situations care should be taken to show the time-place relationship existing between them. An indiscriminate skipping from age to age and from place to place can spoil the major purpose of the section.

In the pre-planning stage where selection of topics or sections is under way some consideration should be directed to the claims and values of the following suggestions:

1. Ancient cultures, notably Athens, Sparta and Rome, with their homes, schools, public buildings, roads, ships, etc., their interesting daily routines, their rich contribution to ideals and fine arts.
2. The Middle Ages, with castles, towns, barbarians, Norsemen, monasteries and hermits.
3. Feudal England, with manors, chivalry and knighthood, minstrels, apprenticeships and craft guilds, markets and fairs, courts, the Magna Carta, churchmen and the Black Death.

ENTERPRISE TITLE

"MERRIE
LIFE IN FEUDAL

Possible Science Generalizations to be Developed

1. Machines were few and simple.
2. Travel was slow on both land and sea.
3. Heavy draft horses were developed for war.
4. Farming was done largely by hand labour.
5. Many herds of swine, sheep and cattle roamed in the forest and fields.
6. Water wheels were used to drive the mills.
7. The system of weights and measures was not accurate.
8. Forest provided all fuel.
9. Open fires were used for cooking and heating.
10. Charcoal was used for special firing purposes.
11. The smith or iron-worker was a very important person.
12. Glass-blowing was a fine art.
13. Carving in wood or stone was beautifully done.
14. The alchemist and the astrologist were the only "scientists".
15. Many devices such as the long-bow, the cross-bow, catapult machines, and battering rams were developed for use in war.

Major Areas to

Suggestive items for research, reading,

I. Food, Shelter and Raiment

Foods and feasts.
Cooks and kettles.
Table manners.
Costume for lord and peasant.

II. Lords and Government

The feudal system.
Kings and Courts.
Vassal and overlord.
Fealty and homage.
Steward and serf.
Robin Hood and the Sheriff of Nottingham.

III. The Church

Bishop and priest.
Monk, scribe and friar.
Monasteries and canon law.

IV. Craftsmen, Merchants, and Burghers

Apprentice and master.
Guild hall and guild plays.
Trade regulations.
Livery and surname.
Story of Dick Whittington.

V. Recreation

Joust and tournament.
Hunting and hawking.
Wrestling and running.

VI. War

Knight and squire.
Armour and weapons.
Coat of arms.

VII. From Medieval to Modern

The Crusades.
Invention of printing.

ENGLAND"
ENGLAND

Grade VI—Section A

be Explored
discussion, reports, charts and lessons.

Castle and hovel.
Tower and dungeon.
Moat and drawbridge.
Hall and bower.
Manor and field.

Trial by combat.
Trial by ordeal.
Trial by jury.
The Magna Carta.
The first Parliament.

Cathedrals and artists.
Holidays and ceremonies.
Crusades and pilgrimages.
"Canterbury Tales"

Caravan and sea-port.
Usury and goldsmiths.
Charters and walls.
Fairs and markets.
Town-hall and curfew.

Minstrels and games.
The May dance.

Archery with the long bow.
Seige and storm.
The Hundred Years' War.

The Black Death.
Invention of gunpowder.

Possible Health Generalizations
To be Developed

1. Windows were few in both castle and hut.
2. Meat and fowl formed the chief diet.
3. All foods were heavily spiced and flavoured.
4. Clothing was loose-fitting.
5. Young men practised vigorous exercises.
6. Large amounts of wine were consumed with the meals.
7. The germ theory of disease was unknown.
8. Blood-poisoning from wounds was common.
9. Bathing and clothing changes were infrequent.
10. Blood-letting by leeches was commonly practised.
11. Barbers were the first surgeons.
12. Many superstitions and beliefs in magic were associated with health.
13. Feasting, singing, and dancing reflected the usual happy nature of the people.
14. No sewage or garbage disposal was provided in the towns and cities.

4. The Crusades with resultant dislocation of feudalism, the new interest in learning, in foreign travel and new appetites for trade and commerce.
5. The Age of Discovery—a review or a supplement to Grade V Section A.
6. The Age of Invention, with its emphasis upon science, upon mechanical power, upon factory production, upon distant markets and faster transportation, upon specialized labour and urban living.
7. The opening of the Western World with its free land, its natural wealth, its promise of better living for all.

Major Learnings:

SOCIAL STUDIES:

1. In ancient times women had no place in public affairs.
2. Ancient people enjoyed many holidays connected with religious worship.
3. Slavery was very common in ancient times.
4. Sculpture and painting were highly developed arts in ancient cities.
5. The Christian Church started in the days of Rome.
6. During the Middle Ages the Church was more powerful than the kings.
7. Latin served as an international language.
8. Monasteries served as schools during the Middle Ages.
9. Craft guilds tried to protect both maker and customer.
10. The feudal system produced many "layers" in its society.

HEALTH:

1. Ancient people were very fond of sports and games.
2. Ancient people lived out-of-doors a great deal of the time.
3. Baths were elaborate public affairs, used a great deal in Rome and Greece.
4. Some ancient people spent a great deal of time studying how to be happy.
5. Hermits often whipped their bodies and starved themselves.
6. Bathing became a "lost art" during the Middle Ages.
7. Meals were served from one common dish.
8. Meat was the chief course at every meal.
9. Leprosy was a terrible disease associated with uncleanliness.
10. City streets were narrow, wet and full of garbage and filth.

SCIENCE:

1. We measure time from the birth of Christ.
2. Ancient people used all simple machines.
3. Water power and wind power were used to drive heavier machinery.
4. The telescope revealed many new things about heavenly bodies.
5. Some ancient people guessed that the earth was round.
6. Ancient people made paper from reeds or fine skins.
7. Pottery making is one of the most ancient industries.
8. Movable type printing was one of the greatest inventions of all times.
9. Galileo was the first modern scientist.
10. Steam engines were invented less than 200 years ago.

Section B—HOW MEN LIVE AND WORK IN CANADA TODAY

Purposes:

"Now patriotism is a universal attribute of normal people. It is grounded in time and space; that is, in the active soil and lanscape of a region, and in the experience of life that, in retrospect, constitutes its people's history. The deepest source of this love of country is neither law nor property, although they play a part in qualifying it: the ultimate source is the land as land, the sky as sky, the people as people."[1]

The avowed purpose of this section is to develop a greater understanding of, and through that understanding, a greater love for our country. No lengthy defence of such a purpose should be necessary. It is enough to indicate that the sampled opinion among both teachers and superintendents has been to the effect that our elementary schools have in the past left many inadequacies in their teaching about Canadian land and people. As good citizenship is the basic core of a desirable behaviour pattern, so allegiance and loyalty to country is essential to a complete value pattern. To achieve that end we must be prepared to go beyond the compilation of the facts of history and geography. The significance of such facts must be interpreted in such manner as to make a healthy appeal to the emotional feelings of Canadian school children. The traditions of Canadian pioneers, the magnificent possibilities through intelligent exploitation of our resources, the cultural and personal contributions of people from all over the wrold who have chosen Canada as their home, these are indicative appreciations we must touch upon if we hope to awaken anything like a universal sense of obligation and devotion to our nation.

Some may complain that such teaching may too easily lead to a narrow nationalism, a bigoted self-interest that thwarts the broader goal of international good will and human brotherhood. This risk, however, does not appear to be a dangerous one nor an inevitable one in any classroom where the teacher has a sound understanding of how people get along with each other. Loyalty and allegiance are expanding rather than restrictive concepts. No one will contend that family devotion lessens one's concern for community welfare. In the same spirit, loyalty to Canada should serve as a basis for more effective judgment and participation in extranational matters.

To achieve this major purpose there will undoubtedly be other lesser outcomes of value and significance. Not the least of these is the necessity for abundant factual information regarding Canada. Anything that assists in the acquisition of **useful** information is a good teaching contribution. Some sensitivity to the background and circumstances of Canadian people in other provinces and regions is essential if Alberta pupils are to identify their own interests with national problems. The growing need for scientific conservation measures must be made apparent through our schools. A regard for law is heightened by some insight of the conditions prompting its origin. Effective social services are dependent upon an acknowledgement of unsatisfactory and disparaging human circumstances within our own borders. Only to the extent that people recognize these problems and accept the burden of remedial action can the cause of Canadian democracy prosper.

1—**Faith for Living**, Mumford, L., Harcourt Brace, 1939, p. 262.

Approach:

It is not intended that all reference to Canada be reserved for this particular section, nor is it necessary that the treatment be overly exhaustive. What is necessary is a comprehensive survey of our country, dealing with the items and the information appropriate for the maturation level of the children of the class. Certainly much relevant information will come to light in developing other sections. Some sections, notably Grade V, Section A, devote themselves primarily to the consideration of some phase of Canada's historical, industrial, or social development. At some specific point in the elementary programme, however, the responsibility for a definite study of the contemporary Canadian scene must be pegged. This section represents that responsibility.

The information regarding Canada that may have been developed in other sections should be reviewed as an introductory measure, and some over-all picture then built up of modern living and modern problems in Canada today. Teachers are warned not to expend the major emphasis of the section on detailed historical surveys. The historical angle will of course have significance, and such investigations as growth of government, pioneer movements and railway building will require some historical study. This study should bring into perspective the contemporary conditions in which Grade VI pupils can take an active interest.

While the political-historical expansion into a nation of nine provinces should not be overlooked, the regional approach is undoubtedly the most fruitful introduction for young pupils. The nature of the land, its fruits and forests, its farms and mines, its waterways and its mountains determine in large measure the activities of the people. Children at this age are primarily interested in activities of other people, and in this study of these activities they can come to see the actual problems our country faces, problems generally regional in nature but national in significance.

The direct relationship between the functions of living and the environment is as important in this section as elsewhere. The difficulties of transportation become apparent when a population map reveals inhabited Canada to be some 3000 miles long and seldom more than 300 miles wide. Shelter is a problem in a land which reaches from as far south as northern California to hundreds of miles beyond the Arctic circle. In establishing this correlation of living and environment constant reference to map study is essential.

Care should be exercised to maintain the investigation and discussion at a level appropriate to the grade level. Any tendency to move to areas of little or no interest to Grade VI children will deaden the Enterprise, and leave little permanent learning. Furthermore children should attempt tentative conclusions only when adequate information is available. Any situation that attempts to define answers without sufficient information can hardly be considered good education.

The Enterprises growing out of this section will be limited in as much as they deal with contemporary Canada from a fairly broad viewpoint. Many themes can be devised, however, to serve as the motif for the organization of the Enterprise. An imaginary radio series for school children with suitable "scripts" has been repeatedly used. A mock parliament could sponsor a "Hansard" full of information

about our country. Cross-country journeys by air, rail or auto are common motifs. The possibilities are limited only by the ingenuity of the teacher and the source of materials available.

Major Learnings:

Suggestive generalizations that might be developed during this section include:

SOCIAL STUDIES:

1. National groups living together in Canada have preserved much of their native culture and tradition.
2. Canada is one of the greatest food-exporting countries of the world.
3. Canada has a vast reserve of vital minerals in her mines.
4. Manufacturing is retarded by the distance between our coal and iron ore deposits.
5. Canada's northland is one of the last pioneer areas of the world.
6. Conservation of our forests has been largely neglected.
7. Canada is becoming famous for its parks and mountain scenery.
8. Radio transmission is difficult and expensive in a long narrow population belt.
9. Canada has joined the United Nations and is participating in all possible ways.
10. Canada has educated many doctors, scientists, authors and other world-famous men.
    (To be added to by the teacher).

HEALTH:

1. Many farm homes have inadequate fire protection.
2. The invention of insulin makes complete digestion possible for people with diabetes.
3. Sudden climatic changes focus attention on clothing, ventilation, and colds.
4. Canada has many parks for our recreation and vacationing.
5. Many games, dances and recreations have been brought here by our immigrant friends.
6. Preservation of food for export is an important Canadian industry.
7. Every Canadian city installs an elaborate water purification system.
8. Canadians are remarkably free from disease for which immunization is possible.
9. Canada's national games appear to be hockey and lacrosse.
10. Most hospitals get government grants or other financial assistance.
    (To be added to by the teacher).

SCIENCE:

1. The Balance of Nature can be observed in our national parks.
2. Many wild animals have adapted themselves to life in farming and ranching areas.
3. Varieties of wheat have been developed specifically for the Canadian prairies.
4. Reforestation is actually "tree-farming".
5. Scientific animal breeding improves Canadian ranching.
6. Forest fires can be controlled by a variety of methods.
7. The growing season is lengthened by increased sunlight during summer.

8. Canada has a vast production of electricity from water power, both developed and potential.
9. Canadian weather forecasting is a well-developed science.
10. The development of the airplane has opened the Canadian northland.
(To be added to by the teacher).

Section C—HOW WE CONTROL GLOBAL PATTERNS

Purposes:

The concept of a round earth is much more difficult to establish than most adults remember. The evidence of our senses in childhood is definitely against such an idea. Much of our ordinary experience adds to the incredulity. In every day experience water does not rest naturally on opposite sides of a ball, rapid whirling motion does not pass without notice or physical sensation, gases do not cling to a spherical solid gyrating through space. Yet these are fundamental phases of our understanding of the earth and its movement. One purpose, then, of this section is to insure that some pupil time and teaching effort will be given over to the consideration of these concepts that at first glance appear almost contradictory.

The sphericity of the earth provides no fixed point of reference, with the possible exception of the uninhabited poles, from which to measure distance or direction. Human ingenuity has accordingly imposed its own arbitrary invention, a network of imaginary intersecting lines to fix locations and designate directions on the earth's surface. It is obvious that this social invention, while of great utility to trained adults, was not devised with any thought for ease of comprehension by school children. Otherwise it would surely have included at least a polar "equator" or something comparable. Functional understanding of latitude, longitude, time zones, international date line and similar concepts requires study and careful teaching. Undoubtedly maturity adds to the ease of comprehension and for that reason material for this section is assigned to the final year of the elementary programme. A further purpose, then, of this section is to establish some functional knowledge of the devices men use to maintain reference points of time and space across the surface of the world, and to insure proper grade placement for such learnings.

As an effort at clarification of space concepts maps of many kinds have been printed, many of them aimed at illustration of specific points. Flat maps invariably offer distortions which must be recognized. Such procedures as great circle navigation and Torrens land survey system (used in western Canada) require explanation and illustration. This section, then, becomes in reality an extension and continuation of Grade V Section C. What has already been said respecting that section applies in large measure to the present section and should be re-read by the teacher planning to implement the suggestions of this section.

Approach:

This section, as a continuation of Grade V Section C, replaces the study of a particular social group by an interest in the widespread efforts of general society to extend man's control over the geographical environment. The section should provide a genuine challenge to both class and teacher. The information is fresh and concrete, and directly concerns the problem of travel and communication which in turn represents a major activity of modern civilization.

Much of the increased importance and interest of this material hinges upon the development of the airplane and its adoption to purposes of war and peace. A ready motivation exists in the normal interest of most classes, particularly of boys, in aviation and kindred topics. Questions relating to longitude, latitude, time, map reading, navigation and meteorology are brought into sharp focus by the extended range of modern air travel. The unique position of Canada with respect to air travel over polar regions gives added emphasis to this approach.

One concept that should not be overlooked is the translation of distance units into time units. Distances are most significant because of the time element they represent in travel. The automobile and more particularly the airplane have upset all former ideas of distance as a barrier. While geographical distance remains constant from the mathematical sense, in a social and political sense it decreases as men learn to move with greater speed and ease. With the promise of rocket projection and supersonic speeds for airplanes the concept of a shrinking world is vitally important.

Another phase that should be stressed is that of direction. Our sense of direction has been established by the travel route we have traditionally followed. The use of the airplane has put direction on a global basis, and the implications for Canada are tremendous. The great powers of Europe and America are no longer only on a west-east line, but also on a north-south line running directly over Canada. What consequences such re-alignment may have only time can reveal, but our pupils must be taught to think in the new terms.

Obviously the use of maps and globes will have an undisputed place in teaching this section. Again the use of the simplified globe is recommended. The introduction of map symbols, scales and meanings must be geared to the child's level of maturity. Careful teaching is needed to guarantee proper spatial orientation, and increased understanding in map interpretation.

Certain concepts are listed here as a guide for teachers in their selection of material. The desirability and order of presentation is left to the discretion of the teacher.

1. Latitude—north, south, high, middle, low; the equator, parallels, Capricorn, Cancer, Arctic and Antarctic circles; determined by angle of North Star of angle of the sun.
2. Longitude—east, west; prime meridian, Greenwich; convergence at poles; determined by chronometer.
3. Time measurement—day and night, solar day, standard time zones, international date line.
4. Distance and direction—great circle, nautical miles, distance a function of time, magnetic poles.
5. Map projections—scales, legends, symbols; Mercator projection, "equal area" propections, polar projections.
6. Land survey in Alberta (Torrens survey system)—ranges, townships, meridians, sections, quarters, correction lines.
7. Seasons and their causes. (Review if taken in Grade V).
8. Weather forecasting. (Review if taken in Grade V).
9. Eclipses and their causes. (Review if taken in Grade V).
10. Trade routes, harbours, canals, locks.
11. Irrigation, dams, water supplies, reservoirs, gates and ditches.
12. Roads, tunnels, bridges.

Major Learnings:

SOCIAL STUDIES:

1. Latitude and longitude can tell us the location of any spot on the earth.
2. The international date line was not necessary until man started to travel around the world.
3. Canada has five standard time zones.
4. Daylight saving time is a special arrangement for convenience only.
5. Greenwich Observatory is recognized as the key point in measurement of longitude.
6. A "great circle" represents the shortest distance between two points on the earth's surface.
7. All flat maps have some distortion in them.
8. The earth has "shrunk" as men have learned to travel faster.
9. Alberta's land survey system is based on a simple rectangular pattern.
10. Many special maps have been made to serve special purposes.

(To be added to by the teacher).

HEALTH:

1. Exploration in polar and tropical regions has been made safer through modern medical science.
2. Radio warnings have been instrumental in saving lives.
3. People have learned that stars do not control health.
4. World-wide travel has made quarantine and inspection laws necessary.
5. Drainage of swamps has improved health conditions in many localities.
6. Faster travel has increased the number and seriousness of traffic accidents.
7. Scientific agriculture provides better crops and foods from our soils and climate.
8. Modern transportation systems reduce our dependence on local food and crop conditions.
9. Co-operation has been necessary to overcome many health and geographical hazards.

(To be added to by the teacher).

SCIENCE:

1. The invention of the compass made trans-oceanic voyages much safer.
2. The chronometer is a very accurate clock by which sailors can determine longitude.
3. The metric system of length is related directly to the earth.
4. The telescope has made astronomy a genuine science.
5. The use of the airplane has removed many disadvantages of long distances.
6. Rockets are planned to travel at high speeds in the stratosphere.
7. Irrigation was developed to reduce man's dependence on climatic conditions.
8. Weather forecasting depends a great deal on the barometer.
9. Good roads overcome many geographic obstacles.
10. Radio warnings of storms save much property damage.

(To be added to by the teacher).

Section D—HOW SCIENCE HAS AFFECTED OUR INDUSTRIES

Purpose:

The effectiveness of science instruction in elementary schools depends upon the degree to which the social implications of science can be demonstrated. The relationship between man, the natural environment and science should accordingly be the delimiting factors in the choice of material and method. Nowhere is this triple relationship more in evidence than in the story of man's efforts to produce goods necessary for life. Here the three factors are constantly at work and the increased productivity of modern industries is witness of effective results. A study then of industrial progress should provide ample opportunity for science teaching that meets the criterion of social consequences.

In such a study the processes and techniques involved are important and interesting. More significant, however, for elementary education is growth in understanding of the increased control man thereby can exercise over the limiting factors of natural environment, the increasing complexity man can thereby introduce into his social arrangements, the increased time man can thereby devote to cultural, intellectual and pastime activities. The purposes of this section are to emphasize such understandings as may concern:

1. The relative flood of consumer goods released through the application of science.
2. The multiplication of wants created through scientific production and consequent increased consumption.
3. The fruitfulness of nature in providing basic materials for the satisfaction of wants.
4. The necessity of conservation to maintain such fruitful supply.
5. The progressive control man has established over natural environment through scientific knowledge and mechanical power.
6. The changes technology has created in social environment.
7. The control and regulation man can exert on social change.
8. The opportunity for enrichment of personal living provided by technology.

Approach:

This section continues the investigations introduced in Grade V Section D. The development of industry is a major phase of our culture and can serve as the core content of an advanced Enterprise. The theme approach rather than the social group approach should accordingly be used. Read carefully what has been written concerning Grade V Section D. Avoid the technicalities of production and the cataloguing of products in favour of some narrative description of how, in various times and places, man has combined natural resources and human resources to improve the conditions of living. Avoid the fallacy of judgment that materialistic and technical progress is the sole criterion of human progress. A great country must do more than run mighty factories and produce record crops. The shepherds of ancient Judea were important people in the process of improving humanity. Right or wrong has no meaning to technology. Only in the hands and minds of men can science have moral significance.

The list of industries remains a relatively small major group with

countless variations. One author[1] names and discusses them under these headings:

(1) The Hunter.
(2) The Herder.
(3) The Farmer.
(4) The Digger.
(5) The Trader.
(6) The Maker.

The teacher may prefer to select one or more for treatment. He may plan to treat the whole group in a limited location, say in Canada or in Alberta. The treatment will naturally depend upon class interests, teacher preparation and available research material.

Major Learnings:

(The Story of Manufacturing taken as a typical selection).

SOCIAL STUDIES:

1. Many common surnames indicate former occupations and crafts.
2. Manufacturing requires many skilled workmen.
3. Manufacturing requires money to buy raw goods and build factories.
4. A steady supply of necessary raw materials is an important factor in manufacturing.
5. Many factories have semi-automatic machines to replace workers.
6. All large cities contain some manufacturing industries.
7. Factory workers usually belong to trade unions.
8. Quarrels between workers and owners cause strikes.
9. Government laws generally set minimum wages for factory workers.
10. Inventors may be paid through royalties.

(To be added to by the teacher).

HEALTH:

1. Modern factories have first aid departments.
2. Many large companies provide medical and hospital care for their workers.
3. Dependence on factory wages frequently causes much worry and anxiety.
4. Factories are inspected for healthful and safety conditions by government inspectors.
5. Noise in a factory is a health hazard.
6. Large factories have special systems of heating and ventilating.
7. Good light is essential for fine machine work.
8. All machinery must have protective devices.
9. Many factories have difficult health problems because of dust and smoke.
10. Many manufacturing areas are accompanied by poor housing conditions.

(To be added to by the teacher).

1—This Useful World, Hanna et al, Scott Foresman, 1941.

SCIENCE:

1. Patent laws protect inventions.
2. All manufacturing processes require power from some source.
3. Water power can be converted to electricity.
4. Electric motors have many advantages.
5. Water power is cheap and permanent.
6. Coal is an important source of power.
7. The steam engine was a very important industrial development.
8. Water transportation is cheaper than land transportation.
9. Most metals are secured by the smelting process.
10. Proper lubrication keeps machines in good repair.
    (To be added to by the teacher).

PARALLEL ACTIVITIES

Each Enterprise should attempt to integrate relevant and appropriate information regardless of the subject field from which it is drawn. The urge of the young child's curiosity and the expansion of his interests tend to discount the "compartmentalization" and the "logical" organization of subject matter that so characterizes later stages of formal education. Stimulating as this enterprise approach may be from the psychological view, it creates added problems for the teacher.

1. A danger exists that certain basic concepts in some of the various integrated fields may be overlooked or omitted in the effort to satisfy the interests expressed by the class. Not infrequently the child completes elementary school with an inadequate impression of the scope and importance of Health, Nature Study, Elementary Science or Civics in modern living. Such inadequacies are due in no small part to these "blind spots", overlooked or neglected in the absence of a formalized course-of-studies statement in these areas.
2. Many sections of material are added to enterprises simply because the teacher feels that the child should have at least a passing acquaintance with the ideas involved. Much irrelevant material consequently shows up in rather unexpected spots of the unit of work. In the hands of inexperienced teachers, this "pin-the-tail-on-the-donkey" technique is often utilized to handle all Science and Health teaching. The only alternative appears to be the introduction of enterprises that are essentially Science or Health units.
3. Sections of work and centers of interest often arise during the year that do not fit smoothly into an integrated programme. Some may be practices that should normally extend over a full school year, some may require close seasonal placements, some arise from unexpected environmental incidents, interrupting or intruding into desirable enterprises already under way. While the skilful teacher will always be ready to modify her programme in view of such circumstancs, a complete integration may be impossible.

In order to give the teacher greater flexibility in attacking these problems it is suggested that the Programme of Studies encourage what are termed parallel activities. These parallel activities can be defined as classroom projects designed to complement the Enterprise outline by handling any concept from the integrated subject fields that may be considered worthwhile and desirable, yet not intimately related to the chosen unit of work. The purpose is to provide opportunity for the introduction of special interests, enrichment exercises, long-term student organizations, seasonal activities and similarly valuable educative experiences without dictating the nature of, or interfering too markedly with, the general overall Enterprise pattern.

At many points a parallel activity may touch upon the Enterprise already under way, and the teacher should be alert for any valuable correlation that might be used to advantage. In presenting a parallel activity all the basic principles and techniques of good Enterprise teaching can be employed. Pupil interest in topic selection, pupil responsibility for collection and maintenance of materials, pupil

reports and records, development of special interests, tasks geared to individual abilities, good leadership opportunities can all be used in parallel activities as fully and as readily as in major Enterprises.

Topics for parallel activities will come most frequently from the areas of Nature Study, Elementary Science and Health. The proposed pattern for the Enterprise has a strong Social Studies bias. Science and health concepts and information are introduced at those points involving direct influence on problems of human living. Science and Nature Study especially depend upon seasonal changes in local environmental conditions, and many teachers may prefer to handle a share of this material through the avenue of the parallel activity. "Science corners" are already commonly used to provide valuable science experiences not directly connected with the regular Enterprise topic. Many health practices and habits should be continued over a full school year for effective results. These can frequently be organized on the basis suggested in this section.

The use of pupil organizations such as Hobby Clubs, and Literary Societies will require a substantial allotment of time at rather infrequent intervals, possibly thirty minutes to one hour per week. It should be quite in order to carry a second parallel activity related to Science, Nature Study or Health. In cases where two activities are under way at least one should be of the type requiring daily attention. Many valuable topics can be found in any locality, or elicited from any group of students who are aware of their environment and what it offers. Collections of seeds, woods, insects, displays of health charts, health records, health films, experiments in elementary electricity or magnetism, aquariums, school gardens, flower plots, window boxes—these indicate only a beginning of the list that an alert class and teacher will encounter during a year's experience.

Special mention should be made of the value of the Junior Red Cross as a parallel activity. It embraces a wide age-range, and in many schools has been a consistent and powerful force for sound pupil motivation. The opportunities it provides for citizenship training, in both democratic practices and in attitudes and ideas, are commendable. Complete information respecting the organization and the programme of work can be had from the provincial organizer.

In conclusion it should be noted that:

1. The parallel activity is in no sense a required or compulsory feature of the revised programme. It is a recommended technique for any teacher who feels that the Enterprise organization does not give adequate coverage to certain desirable topics or practices in related fields.

2. The parallel activity technique should be used with discretion. Certainly not more than two such activities should be carried on simultaneously in any classroom. No daily or weekly time limit is suggested, but these activities should be kept in a minor role with respect to the major Enterprise programme.

3. The parallel activity must be kept on an "activity" basis, with due regard to the type of teaching implied thereby. It is certainly not to be misinterpreted as a segregation of Science, Nature Study and Health into separate subject fields for elementary teaching purposes.

HEALTH

Point of View

Health instruction aims at organizing and utilizing child experiences that will lead to an improvement of those desirable practices, habits, attitudes, and understandings that mark healthful living. Health is one area where the value of teaching can be well measured in terms of improvement of pupil behaviour. Factual information and resultant objective testing have a specific place in our programme. However, it cannot be emphasized too strongly that the primary objective is sound day-to-day health practice. We must assure the pupil of more than a verbal acquaintance with the tools of health: good food, fresh air, sunshine, rest, exercise, soap and water, the toothbrush, relaxation, the advice of doctor and nurse.

The key to good health is to be found in practice situations for the health rules that have been learned. Normal habit formation requires repetition. Teachers at every level should be prepared to check basic health practices within the school environment. The teacher shares a joint responsibility with the school board and the superintendent to see that the child secures good light for his work, that he has adequate washing and drinking facilities, that he works in a clean, warm, well-ventilated and attractive room, that he sits at a properly adjusted desk, that he has sanitary toilet facilities, that he has opportunities to engage in active play out-of-doors.

Problems of individual health cannot be disregarded. The extent to which the teacher can effect remedial care for individual defects will vary according to local circumstances. He should be prepared to appeal to parents, service clubs, public health agencies and any other likely sources for help in such instances. An annual health examination by doctor or nurse should be encouraged. In other cases the teacher can test vision by the Snellen eye chart, can detect dental caries, serious malnutrition, diseased tonsils and adenoids, poor posture, and other obvious physical disabilities. Whenever possible, regular weight-measurement records should be kept. A record of illnesses and immunizations will frequently be valuable for reference. Complete health record cards are set up in schools where health improvement becomes a vital objective.

The noon lunch-hour in a rural school provides an invaluable opportunity for good health teaching. There are opportunities for cooking, for serving a hot dish or drink, for practising good table manners, for planning well-balanced meals, for developing habits of cleanliness and tidiness, and for encouraging the pleasant conversation and association that add to the health score.

Communicable diseases are frequently spread through school contacts. The teacher must act as the guardian of health from both the community and the individual view in attempting to prevent unnecessary danger of such exposure. In addition to informational teaching he must be watchful for preliminary signs of illness, and take early precautions to prevent the spread of communicable diseases through the school. Every teacher should be familiar with his responsibility for health as stated in Section 176 (1) of the School Act, and in the regulations of the Department of Health.

Health remains one of the integrated subjects for the Enterprise programme. The instruction should relate itself to the major unit of

work whenever it seems relevant and feasible. The Enterprise outline emphasizes throughout the concept of social problems. Health services, health practices, even problems of individual health are of direct concern from the social viewpoint. Attention is directed to three points: The first is that the problem of Health, Safety and Welfare is accepted in this programme as a major problem of social living and is treated accordingly in the scope outline (see page 21). The second is that provision is made through Parallel Activities for the handling of any desirable project or concept that does not appear to tie in neatly with planned Enterprises (see page 88). The third is that a suggestive Health outline is included in the present Programme of Studies.

A further word respecting this Health outline should emphasize that it is suggestive only. In accord with the plan previously stated it is organized on the basis of two-grade pupil grouping. Teachers having single grade rooms should feel free to choose any materials appropriate for the grade level. Much more can be said about any topic than will be covered in a single grade, and in every case some repetition after a year's interval will be helpful. It is not intended that all materials suggested will be covered in detail. Certainly the order of presentation of ideas need not follow the suggested outline, nor would any combination of ideas or activities be out of place. In the past teachers have not infrequently given Health a rather scanty treatment in their Enterprise pattern. The present outline should serve to remind all teachers of the material suitable for various grade levels, of which pupils might normally be expected to have some degree of knowledge.

The materials outlined are organized on what has been called the "expanding concepts" basis. Ten major themes have been chosen to present materials suitable for the elementary school. Each child will bring certain preschool concepts developed through the home and other environmental contacts. The school through its experimental programme should organize these concepts and build upon them by the introduction of appropriate new information and activities at successive grade levels. Thus the child enters schools knowing the foods he enjoys most. In Grades I-II he may learn something of the value of milk and a variety of fresh vegetables. In Grades III-IV he learns that food allays hunger, promotes growth, provides energy and heat and replaces worn tissues. In Grades V-VI he comes to know something of food preservation, and the general classifications such as fats, carbohydrates, proteins, minerals and vitamins. In Grades VII-VIII he learns about calories, elements and food laws. Thus health concepts continue to grow and expand as the programme unfolds throughout the entire school experience.

HEALTH—GRADES I-II

SUGGESTED UNDERSTANDINGS AND EXPERIENCES

MAJOR THEME

I—Cleanliness.

(a) SURROUNDINGS:

1. Learns to put toys, games, etc., in proper place. Makes and decorates suitable boxes, shelves, etc., for classroom storage.

2. Keeps floor clear of debris. Clears away paper scrops, etc., before dismissal.
3. Cares for books, pencils, etc. Arranges display of well-kept and abused articles.
4. Notes and removes marks on walls, desk tops, etc.
5. Assists in room decoration.
6. Discusses and practises proper lavatory care.
7. Disposes properly of lunch scraps.
8. Discusses methods of helping at home.

(b) BODY:

1. Washes hands regularly — for appearance — before lunch—after toilet.
2. Discusses and practises the handkerchief habit.
3. Learns proper use of toothbrush.
4. Discusses and practises care of clothing and wraps.
5. Discusses value of regular bathing.
6. Uses classroom mirror for hair combing, etc.
7. Discusses how animals keep clean.

II—**The Body and Its Functions**

1. Learns names and functions of obvious body parts: head, trunk, limbs, joints, etc.
2. Discusses proper toilet habits.
3. Learns function and care of teeth.
4. Learns dangers of foreign objects in ear, nose, eye, ear, mouth.
5. Learns danger of shouting in the ear or of striking the ear.
6. Has proper medical and dental examination.
7. Wears glasses is prescribed.
8. Reads only print of proper size.

III—**Food and Nutrition.**

1. Practises good eating habits: chews well, eats slowly, relaxes, etc.
2. Learns value of good food: milk, vegetables, variety of food.
3. Cleans hands before meals. Learns need for clean dishes.
4. Has good supply of fresh water and individual cup or fountain.
5. Classifies suitable foods for meals. Makes attractive charts and models.
6. Learns to avoid tea, coffee and excessive sweets.
7. Visits market or garden.

IV—**Fresh Air and Sunshine.**

1. Plays out of doors.
2. Goes on excursions and field trips with teacher and class.
3. Makes attractive posters showing value of fresh air and sunshine.
4. Wears proper clothing for cold or wet weather—makes illustrative charts.
5. Uses best available lighting for all tasks.
6. Learns value of open window for sleeping.
7. Adjusts window shades, avoids glare.

8. Keeps calendar record of weather.
9. Experiments with window plants for effects of sunshine.

V—**Rest and Exercise.**

1. Learns proper games and activities for both indoors and outdoors to develop big-muscle control.
2. Has daily programme providing rest and exercise periods.
3. Enjoys rhythmic games.
4. Learns proper clothing for exarcise.
5. Rests after meals, and after hard exertion.
6. Learns hours and habits of proper sleeping.
7. Practises proper movement in classroom corridor and playground.
8. Discusses how animals and birds rest.

VI—**Posture.**

1. Has properly directed play and Physical Education periods.
2. Has proper desk adjustment.
3. Has remedial care for detected physical defects.
4. Wears comfortable clothing and shoes.
5. Discusses ill-effects of working under strain.
6. Draws line figures illustrating good posture.
7. Composes riddles and jingles about proper posture.
8. Is encouraged in items promoting self-respect and self-confidence.

VII—**Community Health.**

1. Learns about agents of community health: janitor, doctor, nurse, street cleaner, garbage men, police, milkman, grocery man and butcher.
2. Avoids common drinking cup, common towel.
3. Learns proper use of drinking fountain.
4. Learns danger from flies, rats, dirt, etc.

VIII—**Safety.**

1. Learns what traffic signs mean.
2. Learns fundamental pedestrian rules.
3. Memorizes home address (city children).
4. Knows traffic patrol boys—and obeys them.
5. Learns to avoid matches, fallen wires, nails, broken glass, open pits.
6. Cleans debris from walks, sidewalk, etc.
7. Learns danger of running in hallways, aisles, etc.
8. Practises correct movement on stairways.
9. Participates in fire drills.
10. Handles scissors, sharp pencils, rulers, etc., with care.
11. Chooses safe playground.
12. Plays safely on swings, slides, etc.
13. Practises caution in play around rivers, lakes, pools, etc.
14. Avoids bottles in medicine cabinets.

IX—**First Aid.**

1. Reports accident to adults, teachers, parents, nurse, etc.
2. Reports all scratches and bites by dog, cat or other pet.
3. Discusses care of simple cut.
4. Becomes familiar with simple first aid equipment.

X—**Mental Hygiene.**

1. Enjoys play and social contacts.
2. Shares equipment with others.
3. Willingly assists others.
4. Accepts share of classroom duties willingly.
5. Works to best of ability.
6. Shows reasonable pride in accomplishment.
7. Obeys rules cheerfully.
8. Participates in group planning.
9. Develops proper table manners—participates in grace at lunch.
10. Shows evidence of self-respect and confidence.
11. Works consistently to overcome errors.
12. Avoids bullying tendencies.

HEALTH—GRADES III-IV

SUGGESTED UNDERSTANDINGS AND EXPERIENCES

MAJOR THEME

I—**Cleanliness.**

(a) SURROUNDINGS:

1. Reviews material from previous grades.
2. Emphasizes individual responsibility for public property and its care.
3. Discourages marking on walls of school and out buildings with pencil, crayon or chalk.
4. Discusses advantages of natural beauty, trees, flowers, grass, etc.
5. Discusses local parks, streets, flower gardens, garbage, sewage, water systems.
6. Participates in decoration with holiday themes, festivals, etc.

(b) BODY:

1. Reviews materials from previous grades.
2. Reports on clothing, washing, bathing, medical care and other health factors among other people.
3. Discusses problems of bodily care in unusual circumstances, e.g. cold lands, on ships, in mines, etc.

II—**Body and Its Functions.**

1. Reviews materials from previous grades.
2. Learns about major tissues (skin, muscle, bone, etc.) and major organs (stomach, lung, heart, etc.) with idea of function and location.
3. Learns the sense organs and their care.
4. Distinguishes between temporary and permanent teeth.
5. Discusses reasons for tattoo and body decoration among primitive people.

III—**Food and Nutrition.**

1. Reviews previous materials.
2. Discusses sources of food of Canada, and of other countries.
3. Learns what national dishes are favoured in other countries.

4. Learns value of balanced diet in contrast to some extreme diets.
5. Encourages use of fruit, fruit juices, etc.
6. Keeps weight—height charts.
7. Plans menus for picnic lunch, school lunch, parties, etc.

IV—**Fresh Air and Sunshine.**

1. Reviews material from previous grades.
2. Learns outdoor and indoor games suitable for age group.
3. Learns and plays games from other countries.
4. Learns how clothing is adapted to various climates of the world.
5. Holds class parties, picnics, etc., out of doors when possible.

V—**Rest and Exercise.**

1. Reviews materials from previous grades.
2. Learns to care for own bedroom as much as possible.
3. Discusses proper hours and conditions of sleep.
4. Discusses things that spoil sleep (late meals, excitement, etc.)
5. Learns how to get proper sleep when travelling.
6. Makes and discusses hammocks, sleeping bags, pup tents, etc.
7. Discusses effects of "shift" workers in factories.
8. Learns about sleep and exercise in foreign lands.

VI—**Posture.**

1. Reviews materials from previous grades.
2. Uses multiple mirrors for study of posture.
3. Draws figures showing correct posture.
4. Discusses proper tests for desks, tables, mattresses, etc.
5. Avoids hands-in-pockets habits.
6. Avoids too heavy lifting and physical labour.
7. Discusses living conditions in other lands that affected posture, e.g. child labour in mines, foot wrapping in Japan.
8. Learns exercises for proper posture, e.g. walking with book on head, etc.

VII—**Community Health.**

1. Reviews material for previous grades.
2. Learns about community sponsored agents of health: hospitals, clinics, water departments, ambulances.
3. Discusses and illustrates life history of fly.
4. Distinguishes communicable and non-communicable diseases.
5. Computes financial loss to average family through illness.
6. Keeps check list on days lost in school by illness.

VIII—**Safety.**

1. Reviews material for previous grades.
2. Practises safety with bicycles.
3. Learns methods of fire reporting and of fire prevention.
4. Discusses dangers from bonfires.
5. Learns about poison label.
6. Practises safety rules for entering and leaving street cars, and autos.

7. Makes list of safety hazards in community.
8. Makes list of safety hazards in homes.
9. Examines local theatres, hotels, for safety devices.
10. Avoids play near railroad tracks, stock yards, etc.

IX—**First Aid.**

1. Reviews material for previous grades.
2. Learns how to treat nosebleed, simple cuts, burns.
3. Discusses antiseptic value of iodine.
4. Discusses need for quiet and warmth for more serious accidents.

X—**Mental Hygiene.**

1. Continues materials from previous grades.
2. Gradually leaves infantile fancies.
3. Realizes dishonesty, lies, etc., are wrong.
4. Develops independence.
5. Avoids destructive tendencies.
6. Develops longer concentration span.
7. Accepts minor failures with good grace.
8. Is protected from situations involving high nervous tension.

HEALTH—GRADES V-VI

SUGGESTED UNDERSTANDINGS AND EXPERIENCES

MAJOR THEME

I—**Cleanliness.**

(a) SURROUNDINGS:

1. Reviews material from previous grades.
2. Emphasizes pleasant surroundings and room decoration: modern homes; utility, sanitation, room arrangement, building materials, home decoration, landscaping, etc.
3. Participates and directs work for Arbor Day, Spring clean up, etc.

(b) BODY:

1. Reviews material from previous grades.
2. Emphasizes use of soap and water, personal responsibility for body care.
3. Emphasizes care of clothing, value of clean underclothing, care of hair.
4. Discusses value of neat appearance.
5. Discusses frequent bathing (skin diseases, etc.)
6. Practises simple manicure.
7. Discusses story of elimination (skin, lungs, kidneys, bowels).

II—**The Body and Its Functions.**

1. Discusses and illustrates major systems of body (digestion, respiratory, nervous).
2. Learns major skeletal divisions of body.
3. Illustrates structure of sense organs.
4. Discusses importance of teeth to health, appearance.
5. Illustrates structure of typical tooth.
6. Learns causes of tooth decay.

III—**Food and Nutrition.**

1. Discusses problems of food preservation.
2. Discusses diseases directly attributable to poor food (scurvy, beriberi, etc.)
3. Learns value of refrigeration in modern food commerce.
4. Discusses pure food laws.
5. Experiments with simple pasteurization of milk.
6. Discusses problems of water supply and purification.
7. Learns and illustrates story of digestion.
8. Discusses problems of balanced diet.
9. Makes and reports on special study of some food (milk, sugar, wheat, etc.)
10. Discusses effects of tea, coffee, tobacco.

IV—**Fresh Air and Sunshine.**

1. Reviews previous materials.
2. Learns suitable games for outdoors and plays them—special attention to suitable games for girls.
3. Learns the story of respiration.
4. Experiments to find out oxygen content of air.
5. Learns simple test for carbon dioxide.
6. Discusses pulmonary diseases and defects.
7. Makes frieze showing how man depends on sunshine.
8. Learns how animals, insects, fish, birds, get oxygen.
9. Makes room temperature chart.
10. Makes and reads hygrometer.
11. Learns principles of ventilation and applies them to the classroom.

V—**Rest and Exercise.**

1. Reviews material from previous grades.
2. Learns folk dances and similar activities connected with pioneer groups or other Enterprise topics.
3. Develops an active interest in athletics and in local and "big-league" sports.
4. Learns something of the story of circulation.
5. Discusses the effects of proper sleep on the body.

VI—**Posture.**

1. Reviews materials from previous grades.
2. Learns corrective exercise in Physical Education periods.
3. Makes silhouettes of figures showing proper posture.
4. Discusses X-ray photography, examines an X-ray plate if possible.
5. Learns elementary facts of bone and skeletal growth.
6. Examines bones of birds, animals, etc.
7. Examines own wet foot-print; makes foot-print on paper with stamp-pad ink.
8. Learns the essentials of proper shoe-fitting.

VII—**Community Health.**

1. Reviews materials from previous grades.
2. Makes lists of community health dangers—and suggested corrections.
3. Invites speakers from community to discuss health topics.

4. Learns basis of germ theory of disease and how germs spread.
5. Discusses signs of communicable diseases, especially epidemic and endemic.
6. Discusses value of quarantine laws.
7. Knows danger of common cold, and suitable treatment.
8. Gathers statistics on health of community.
9. Investigates health programme of service clubs, and assists where possible.
10. Discusses health heroes—Pasteur, Jenner, Lister, Curie, etc.

VIII—**Safety.**

1. Reviews materials from previous grades.
2. Joins traffic patrol.
3. Accepts responsibility for younger children on street, playground, etc.
4. Invites fireman to give talk to class.
5. Learns danger of "hopping" rides, street play, rough play.
6. Learns how to call fire department.
7. Learns safety precaution in hockey, baseball, other games.
8. Discusses danger of carbon monoxide in cars, garages, etc.
9. Keeps snow and ice from school walks, steps, etc.
10. Collects accident statistics for city, country, etc.
11. Learns to operate fire extinguishers.
12. Computes cost of fires, cost of accidents.
13. Discusses danger of kerosene, gasoline in starting fires.
14. Learns how to swim.

IX—**First Aid.**

1. Reviews materials from previous grades.
2. Practises the using of first aid kit.
3. Practises simple bandaging.

X—**Mental Hygiene.**

1. Continues practices from previous grades.
2. Shows tolerance for others—particularly for opposite sex.
3. Respects public property.
4. Respects rights of others.
5. Does not overdo "show off" tendencies.
6. Develops leadership through games.
7. Accepts decisions in games gracefully.
8. Avoids over-excitement.
9. Develops regard for proper "heroes".
10. Develops keen interest in hobbies, sports, etc.

SCIENCE

Point of View:

Science tends to lose its identity as a separate subject under the present Alberta programme. This should not be misconstrued as in any sense a disparagement of the importance of science in elementary schools. It is fully recognized that the present world is largely

unintelligible to one who is ignorant of science and of its contribution to modern living. It is held, however, that there should be no rigid separation of science from health and social studies in the elementary grades. Elementary science material should be introduced as a **natural** part of a major socialized activity, and should make its contribution to general educational objectives in intimate relationship to either areas of learning.

Science offers one of the richest fields for direct experience for boys and girls. In no other area of the elementary school is there the same vital interest and motivation waiting to be utilized for better learning procedures. The necessity is not to stimulate pupil interest so much as to guide pupil understanding and enjoyment of the environment. In the treatment of the Enterprise ample opportunity will be afforded for the introduction of science activities. The alert teacher will readily recognize where science functions as an integral part of the study in hand. Two warnings should perhaps be noted in passing. The first is that where science material does not have a natural relevant bearing on the Enterprise topic it should not be dragged in for its own sake. The second is that the content of science materials for the elementary grades should be concerned primarily with the **immediate environment** of the pupils and the use man makes of this environment for his increased comfort.

There is no fundamental change recommended as to the content material to be drawn into the science area of a socialized activity programme. Trees, flowers, birds, insects, animals and all other living things have a natural attraction for children. The earth with its many manifestations and forms and the sky with its array of stars and planets present mysteries and revelations. Machines with their demonstrations of controlled power offer special fascination for most boys. All or any of these fields can provide a wealth of content for elementary classes. The selection of content for interest and permanent value and the relation of that content to the unit of study undertaken can only be done by the classroom teacher.

The small scale laboratory as a place in which to experiment should be a conspicuous feature in a classroom corner and an essential part of the school layout. Experiments are often a bit "messy" and test tubes often spill over. For this reason a special place in the classroom should be set aside for the laboratory activity and for the storage of equipment materials. A large label, ELEMENTARY SCIENCE, should appear well up in the corner selected for science activity. An experiment table or desk, with upright shelves at the back and sectioned shelves below, should be improvised. Even a set of apple boxes, nailed together can be made into a satisfactory laboratory set-up. An oilcloth cover for the desk top will insure tidiness. The shelves and desk top must always be left orderly, clean, and with all materials in proper compartments. Piles of stuff in helter-skelter arrangement must never be allowed. Part of the science training should be found in the systematic arranging of all equipment. Order is nature's first law.

One reason why science is frequently avoided by the elementary teacher is the mistaken idea that the teacher must have specialized knowledge or training in this field to handle it successfully. Conceivably, advanced and formal science training can be a handicap to the elementary teacher if it results in teaching above the comprehension level of the children. "The teacher need not be an encyclopedia of

information. She must be willing to explore and learn with the children. Her major aim will not be to develop scientists but educated laymen who 'think and do' more intelligently." *Understanding and appreciating scientific methods and scientific attitudes is the primary objective in the elementary school, and without doubt can best be illustrated by science experiences. This objective must, however, not be limited to science, but applied with equal weight to every field where important facts stand in cause-and-effect relationship.

Science remains an integral part of the Enterprise programme. Several steps have accordingly been taken to insure more attention to Science than has commonly been accorded in the past.

(1) A tenth problem has been added to the Scope pattern, namely **Observing and Conserving Nature.** It is hoped that teachers will be encouraged to think more keenly regarding the importance a knowledge of nature plays in our social progress. The teaching of conservation has traditionally been approached as our responsibility to the world of the future. Present trends, however, indicate that even in this rich, new land of Canada, conservation programmes are of direct significance to our present generation. In every concerted conservation effort public education is an essential factor. Certain concepts of conservation can be mastered even at the primary grades, and teachers are urged not to overlook opportunities for such learnings.

(2) The present Scope and Sequence pattern discourages the selection of isolated Science topics for major enterprises. It does, however, embody in each grade from III to VI a section in which the place and influence of science in social living can be predominant. In each grade Section D has been so arranged as to offer special opportunities for the introduction and development of appropriate science concepts.

(3) Special provision has been made for handling one type of Science difficulty through the introduction of Parallel Activities. Ideally perhaps, all science content should be integrated and assimilated fully into the regular activity programme, and Alberta teachers should continue to strive for this effect where it can be reasonably achieved. In the meantime science topics will continue to arise from time to time that make correlation most difficult. In our usual classrooms these may be handled more readily as Parallel Activities.

(4) Many teachers seek suggestions for materials in the correlated fields suitable for introduction at various grade levels. An outline has accordingly been developed to suggest problems most generally considered appropriate for each of the pupil groups. The topics have been grouped under three major headings: **Living Things, The Earth and the Universe, Energy and Machines.** The listed problems are in the nature of suggestions to teachers and no particular problem need be considered as essential in the elementary school. Even the three major groupings need not be considered obligatory. Certain teachers may prefer to develop the Nature Study aspect, which is essentially contained in the section on **Living Things.** Such a development, properly treated, can certainly be satisfactory. The treatment follows what is called the "expanding concepts" organization, which has been previously noted under "Health". In each of the three general themes certain

*Mary F. Badcock et al, Science and the Young Child, Association for Childhood Education, Washington D.C., 1936, page 1.

concepts will be introduced at Grades I-II level. These concepts will be enlarged at the Grades III-IV level and additional ones introduced. Other expansions and addition are made as they become necessary at successive grade levels.

SUGGESTIVE SCIENCE MATERIAL

MAJOR PROBLEMS—Grades I-II

MAIN AREAS

LIVING THINGS:

1. What are animals? Identify, collect information, pictures.
2. What are plants? Identify, collect information, pictures.
3. How do animals get their food?
4. How do plants get their food?
5. What homes do animals have?
6. How do animals prepare for winter?
7. How do plants prepare for winter?
8. How do animals help man? How does man help animals?
9. How do plants help man? How does man improve plants?
10. How do animals care for their young?
11. What can we do to make plants grow better?
12. What makes our earth beautiful? How may we keep it so?

EARTH AND THE UNIVERSE:

1. How does the sun help us?
2. How do the stars and moon help us?
3. What makes up the moon's surface?
4. How do we use water? How do we purify water?
5. How do we use soil? How do we make soil better?
6. How do we use rock?
7. How do we tell directions?
8. What are our seasons? How do they affect us?
9. What is the weather like in each of our seasons?
10. What is rain? snow? fog? wind?

ENERGY AND MACHINES:

1. How do machines help man?
2. How do we make machines go?
3. How does man use fire?
4. How do we take care of machines?
5. How do we use electricity in our home? In our schools?
6. How do we get coal?
7. How do we get oil? gasoline?
8. How do we get electricity?

MAJOR PROBLEMS—Grades III-IV

MAIN AREAS

LIVING THINGS:

1. What are the conditions of good plant growth?
2. What are the conditions of good animal growth?
3. What are some simple adaptations in animals for getting food?

4. What are some simple adaptations in animals for protection?
5. What are some simple adaptations plants have made to their environment?
6. What are some simple adaptations plants have made for protection?
7. What are the usual parts of a plant? What are the uses of each part?
8. How are seeds spread?
9. How are animals classified?

EARTH AND THE UNIVERSE:

1. What is the sun?
2. What shape is the earth?
3. How does the earth move?
4. What are the stars?
5. How do we learn about stars?
6. Why does the moon change?
7. What are "shooting stars"?
8. What are planets?
9. What is a compass?
10. How do magnets behave?

ENERGY AND MACHINES:

1. What is work?
2. How do animals help in our work?
3. What are the simple machines?
4. What is gravity?
5. How can we use water to do work?
6. How can we use steam to do work?
7. How can we use gasoline to do work?
8. How can we use electricity to do work?
9. How can we use wind to do work?
10. How do we use springs to do work?

MAJOR PROBLEMS—Grades V-VI

MAIN AREAS

LIVING THINGS:

1. How do plants and animals help each other?
2. How does man affect the Balance of Nature?
3. What are other animal adaptations for food? for shelter? for protection?
4. What are other plant adaptations for food? for protection?
5. How can man conserve plants and animals?
6. How does man employ plants and animals?
7. What is the normal cycle of life for various kinds of animals?
8. What is the normal cycle of life for various kinds of plants?
9. How have plants and animals changed through the ages?
10. How do molds and bacteria affect man?

EARTH AND THE UNIVERSE:

1. How does the earth's surface change?
2. How can man promote desirable change? retard undesirable change?
3. What is the solar system? What is the universe?
4. What causes eclipses?
5. What are comets?
6. What are the main geological features of your district?
7. What causes seasons?
8. What causes rain? snow? hail?
9. What causes wind?
10. How do we forecast weather?

ENERGY AND MACHINES:

1. What are examples and uses of simple machines?
2. What is friction?
3. How do we produce electricity? How do we control it?
4. What is sound? How does it travel?
5. What do we know about light?
6. What are elements? mixtures?
7. What does heat do to materials?
8. How do we measure things accurately?
9. How do we control fire?
10. How do we conserve fuel and energy?

LANGUAGE

The revision of the language course for elementary grades is based primarily upon the organization of material presented in the authorized texts. The textbooks chosen for use in Alberta schools are the **Language for Meaning** series, and the outline of this course follows essentially the content of the respective books for Grades II-VI in that series. Teachers are advised that while the complete series includes a text, a teachers' guide and a work book for each grade from Grade II to Grade VI the student is not required to purchase more than one.

In Grades II-III the workbooks only have been authorized for pupil purchase. The complete text and teachers' guide are recommended for teacher use.

In Grade IV-V-VI the complete text only has been authorized for pupil purchase. The guide and the workbook are recommended as references for the teacher.

The authorization of a new textbook series does not exclude the introduction of suitable language material from other sources. Many teachers have collected favorite materials or may discover good material elsewhere that can be used to advantage for supplementary purposes. Indeed many teachers feel that language experiences can well benefit by such additional materials. For example some may find the series of lessons on description in the **Language for Meaning** books to be rather factual and prosaic. While practical, factual description has a place in correct expression, pupils should certainly be inspired to attempt writing occasionally with some feeling for literary style. Suitable samples of fine poetry and prose from any available source might be introduced to acquaint pupils with better writing than they might otherwise encounter. (It might be noted in passing that the practice followed throughout this series in omitting the author's name from poems is not necessarily recommended).

Teachers may feel that particular lessons require heavier emphasis. If so, it is their privilege to supplement the text in those areas. In some instances the short primer-type sentence has been used rather extensively and some practice in writing longer sentences might well be introduced. More clear-cut differences might be drawn at times between the essential nature of a story and a report. Some teachers are fond of using a diagrammatic representation in illustrating the climax of a story. Others may wish to introduce more numerous examples of first-rate short stories from such sources as Aesop's Fables rather than use only stories of immediate child experience. Some ideas mentioned throughout the series may be selected for further treatment. The school newspaper illustrated on page 21 of **Making Words Work** (teachers' reference) is a suggestion that might be widely used.

One of the frequently disappointing features of the activity programme in our elementary schools has been the matter of pupil reports. Teachers will note the stress throughout this series on the making of good reports. It is hoped that the work in the Enterprise activities will correlate readily with this language emphasis and that a general improvement in pupils' written and oral expression may result.

The outline of materials for each grade follows very closely the unit organization of the authorized books. This summary has been included for a definite purpose. The outline for any one grade will be of relatively little value to the teacher who has in her hands the text for that grade. It will be, however, of definite value to the teacher of other grades who may not have at hand the complete series but who should understand the overall organization of the series and who should recognize the articulation between successive grade levels of the elementary school. In other words the Grade V outline is included here primarily for the benefit of all teachers not using the Grade V book.

The problem of cycling has been left largely to the discretion of teachers, principals and superintendents in consultation. **The cycling pattern in language should conform to the cycling pattern in Enterprise activities in every phase.** If the recommended two-year cycle in Enterprise work is used a similar cycle is to be used in language. If a three-year cycle is used in Enterprise work a three-year language cycle should be used.

GRADE I

Language in Grade I should relate closely to the reading programme and to the Enterprise activities. No text has been authorized and no list of minimum essentials of accomplishment has been prepared. Marked individual differences may require a full year's treatment before uniform exercises and general class problems can be of major significance.

During the first year emphasis will normally centre on oral expression. Systematic and organized provision should be made to insure many opportunities for oral language experiences for each pupil. The daily programme should make use of the fact that language functions as a desirable skill in every field of learning—arithmetic, construction work, music, dramatic play, etc. Special attention will be necessary for those pupils whose background or maturation makes oral expression a particular problem. The teacher can through correct example be a definite factor in improving the standards of speech in any classroom. Many children are self-conscious over mistakes and respond poorly to indiviual remedial and corrective exercises in speech training. Group participation in throat, lip and tongue exercises and in choral speech is frequently desirable and beneficial. Those who have defective speech habits should nevertheless be encouraged to express themselves freely without fear or strain. Correction should not be carried to the point where emotional tension becomes manifest.

The alert teacher will find many activities that lend themselves to proper oral expression. A partial list that every teacher should cultivate include:

Free conversation—

Play period activities with picture books, puzzles, games, play house, imaginary trips, etc. Individual conversation with teacher on topics of interest such as home activities, birthdays, pets, etc. Lunch period and play ground activities involving games, dramatic play, etc.

Guided conversations and discussions—

Group discussions about pictures, homes, stories, dolls, pets,

people, holidays, etc. Planning units of work, special activities, etc. Talking to visitors, superintendent, principal, etc.

Messages—
Delivering messages to principal, nurse, other teachers or parents. Making announcements before the class.

Stories and poems—
Individual performance in repeating poems or retelling story for class enjoyment. Group activities in choral speech.

Dramatization—
Dramatic play in connection with Enterprise work, reading programme, music period, etc.

Social courtesies—
Please, thank you, and similar politeness in daily social activities at school, at play, and at home.

Written language is a more deliberate process than oral speech, and should accordingly be developed only as the child realizes a need for written expression. A child normally expresses himself only as he feels the situation demands, and past experience has simply not necessitated written expression for the beginning child. Readiness will accordingly depend upon situations requiring writing as a normal or desirable solution. The first written language exercises are generally co-operative efforts where the teacher writes the words expressed by the child or the class. Sometime during the first year each child should begin to do some individual writing of his own composition as well as copying from the blackboard or from some other source. Sentences will be of the simplest type and in many situations only the writing of single words, name cards, signs, own name, picture captions and similar items will be required.

GRADE II

Authorized for pupil purchase: **Let's Write,** McKee and Harrison.
Authorized for teacher purchase: **Let's Talk** (complete text), McKee and Harrison.
Teachers' Guide to Let's Talk, McKee and Harrison.

During the year continued attention will be given to oral expression and to specific problems arising from individual speech habits. The work begun in Grade I in oral expression, in speech improvement, in individual stories, and in class discussions will be carefully continued. The text **Let's Talk** will provide many suggestions for interesting topics for such remedial and developmental exercise. It appears that effective corrections in language are best accomplished through oral practice. While certain usages such as **saw** and **have seen** must be explained and accompanying rules developed, too much faith should not be placed in written exercises as effective learning devices. Correct usage in oral expression must be developed through oral practice. The correction of errors must be accomplished first by attention to outstanding mistakes. The correction devices and techniques must be so unobstrusively introduced that no serious interruption of the pupil's thought will be noticed. When speech correction reaches the point where the pupils begin to speak hesitatingly the positive value and purpose have been lost. Children should become

conscious of correct form and some genuine interest in speech improvement must be aroused. Corrections and tiresome drills should, however, never be carried to the point where they interfere with the free natural flow of language and inhibit the desire for self-expression.

The authorized pupil workbook **Let's Write** has not been organized into units as have the succeeding texts. The included exercises should serve as a pupil initiation in the art of more formal written expression and as a teachers' guide for acceptable form, content and accuracy in written expression in other school situations. Normally much of the written, as well as the oral, expression will arise out of the activity programme. Such opportunities for expression should be given priority without neglecting the developmental and remedial exercises presented in this short language workbook.

GRADE III

Authorized for pupil purchase: **Writing Correctly,** McKee and Harrison.

Recommended for teacher purchase: **Making Words Work** (complete text), McKee and Harrison.

Teachers' Guide to Making Words Work, McKee and Harrison.

Unit I. **Writing and Talking.**

Rules for good conversation.
Pronouncing words clearly and correctly.
Making and using sentences.
Practising conversation.

Unit II. **Letters.**

Learning the three main parts of a letter.
Using capitals and punctuation correctly.
Using seen, saw; did, done; gone, went.
Practising letters to your friends.

Unit III. **Reports.**

Planning and making reports.
Using proper sentences in reports.
Using come, came; run, ran.
Practising reports for your class.

Unit IV. **Description.**

Picking out important differences.
Making good sentences.
Choosing exact words and using is, are; was, were.
Practising good description.

Unit V. **Storytelling.**

Planning the correct order for story events.
Speaking clearly and correctly in stories.
Using good sentences in stories.
Telling and writing stories for practice.

Unit VI. **Telephoning.**

Answering the telephone at home.
Using shortened words and other words.
Correct words for conversation.
Practising what you learn.

Unit VII. **Book Reports.**

Telling friends about books.
Capitals and punctuation marks for book reports.
Good paragraphs in reports.
Practising correct form in book reports.

Unit VIII. **Business Letters.**

Parts of a good business letter.
Using more words correctly.
Capitalization and punctuation in business letters.
Practising what you have learned.

Unit IX. **Descriptions.**

Selecting important details for descriptions.
Speaking clearly and correctly.
Choosing correct words and exact meanings.
Practising good descriptions.

Unit X. **Stories and Poems.**

Writing good stories.
Making good paragraphs.
Fun reading and writing poems.

GRADE IV

Authorized for pupil purchase: **Gaining Skill with Words,** McKee and McCowen.

Recommended for teacher purchase only: **Teachers' Guide to Gaining Skill with Words,** McKee and McCowen.

Workbook, **Writing for Skill,** McKee and McCowen.

Unit I. **Conversation.**

Rules that help everyone enjoy conversations.
Speaking clearly and correctly in conversation.
Using correct words and exact meanings in conversation.
Practice in conversation.

Unit II. **Reports.**

Interesting topics for interesting reports.
Good sentences to use in reports.
Finding the meaning of new words.
Practice in writing interesting reports.

Unit III. **Friendly Letters.**

Writing letters to your friends.
Capital letters and punctuation marks in letters.
Using words correctly in letters.
Practice in writing good letters.

Unit IV. **Storytelling.**

Planning and improving stories.
Using good sentences in stories.
Using correct words in stories.
Practice in storytelling.

Unit V. **More Letters.**

Writing interesting, polite letters.
Comma and apostrophe in letter writing.

More new words to use in letters.
More practice in writing letters.

Unit VI. **Telephoning.**

Finding numbers and placing calls.
Using good sentences on the telephone.
Using correct words in conversation.
Practising telephone calls.

Unit VII. **More Letters.**

Planning and writing a class letter.
Capitals, question marks, periods and commas in letters.
Using correct words in letters.
Practice on letters and envelopes.

Unit VIII. **More Stories.**

Interesting titles and surprising topics for stories.
Using difficult words: isn't, aren't, wasn't, weren't, eat, ate, eaten, give, gave, given.
Making and punctuating sentences.
Practice on words and meanings.

Unit IX. **Social Customs.**

Polite invitations and greetings.
Reviewing difficult words.
Writing notices.
Words of opposite meaning.

GRADE V

Authorized for pupil purchase: **Sharing Experiences,** McKee and McCowen.

Recommended for teacher purchase only: **Teachers' Guide and Key for Sharing Experiences,** McKee and McCowen.

Workbook, **Writing from Experience,** McKee and McCowen.

Unit I. **Conversation.**

Topics, rules and practices in conversation.
Making and using good sentences in conversation.
Pronunciation, voice control and word meaning in conversation.
Practice in conversation.

Unit II. **Letters.**

Topic, form and parts of personal letters.
Capitalization and punctuation in business letters and envelopes.
Using correct words and exact meanings in letters.
Practice in letter writing.

Unit III. **Reports.**

Choosing, organizing and following topics in reports.
Using books to find information for reports.
Using the dictionary to improve reports.
Practice in reporting.

Unit IV. **Stories.**

Topic, titles and form for good stories.

Using good sentences in stories.
Speaking clearly and correctly in stories.
Practice in story telling.

Unit V. **Book Reports.**

Planning and writing book reports.
Capitalization and punctuation in book reports.
Using correct words and exact meanings in book reports.

Unit VI. **Customs in Conversation.**

Rules for polite introductions, invitations, table conversation and telephone conversation.
Using correct words and exact meanings in conversation.
Combining ideas into good conversational sentences.
Practice in conversation.

Unit VII. **More Letters.**

Topics, rules and practice in letter writing.
More capitalization and punctuation in letters.
More words to use correctly in letters.
Practice and tests in letter writing.

Unit VIII. **More Reports.**

Planning and wording a report.
Using suitable words and exact meanings in a report.
Making good paragraphs for reports.
Practice in writing and giving reports.

Unit IX. **More Stories.**

Direct quotation and other rules for good stories.
More words to use correctly in stories.
Using good sentences in stories.
More practice in writing and telling stories.

Unit X. **Giving Directions.**

Rules for giving clear directions.
Speaking clearly and correctly in giving directions.
Fun with poetry.
Practice and review in using words.

GRADE VI

Authorized for pupil purchase: **Communicating Ideas,** McKee and McCowen.

Recommended for teacher purchase only: **Teachers' Guide and Key for Communicating Ideas,** McKee and McCowen.

Workbook, **Writing Clearly,** McKee and McCowen.

Unit I. **Discussions.**

Rules for improving discussions.
Using good sentences in discussion.
Using correct words in discussion.
Practice in discussions.

Unit II. **Reports.**

Topics, paragraphs and sentences in reports.
Using books in preparing reports.
Choosing and using correct words.
Practice in reporting.

Unit III. **Letters.**

Good topics and good form in letter writing.
Capitalization and punctuation in letters.
Building sentences with subjects and predicates.
Practice in letter writing.

Unit IV. **Reviews of Books and Programmes.**

Books, motion pictures and radio programmes.
Nouns and verbs in book reports.
Capitalization and punctuation in book reports.
Practice in writing reviews.

Unit V. **Storytelling.**

Titles, beginnings and quotations in storytelling.
Pronouns in story telling.
Pronunciation and voice control in stories.
Practice in storytelling.

Unit VI. **Conversation.**

Courtesy and good manners in conversation.
Correct words for enjoyable conversation.
Combining ideas for better sentences in conversation.
Practice and tests for good conversation.

Unit VII. **Longer Reports.**

Rules to improve reports.
Using better paragraphs for reports.
More correct words for reports.
Practice in writing longer reports.

Unit VIII. **Social Letters.**

Social letters written for a definite occasion.
Capitalization and punctuation in letters.
Using adjectives, adverbs and conjunctions in letters.
Practice in writing better social letters.

Unit IX. **Descriptions.**

Organizing information for clearer description.
Using prepositions for better descriptive sentences.
Interrogative, imperative and exclamatory sentences for description.
Comparative and superlative adjectives and adverbs in descriptions.
Practice in writing clear descriptions.

Unit X. **Stories and Poems.**

Reviewing rules for good stories.
Speaking clearly and correctly for good stories.
Fun with poems and limericks.
Practice in expression.

READING

The authorization of several reading series has been made for each grade in the elementary school and for each series accompanying workbooks have been developed to provide a variety of exercises designed to give the pupil practice in certain definite reading skills. The teachers' guidebooks that accompany each reading series have been prepared by experts in this field. **These guidebooks must be considered indispensable in Alberta classrooms.** No teacher can afford to be without the guidance in lesson procedures and the suggestions for teaching methods contained in these manuals.

Grades I-III.

Three series have been approved:

New Basic Readers in the Curriculum Foundations Series.

Easy Growth in Reading Series.

New Work—Play Series.

In each series the primers, Level One readers for each grade, the pupils' workbook for Level One readers, and the teachers' guidebooks have been officially authorized. All other material in each series is recommended for use when available. The catalogue of the School-Book Branch, Department of Education, lists the respective titles for each series and each grade.

Grades IV-VI.

Three series have been approved.

Canadian Parade Readers.

Canadian Reading Development Series.

Highroads to Reading Series.

In each of these series pupils' workbooks and teachers' manuals are recommended for use when available. The catalogue of The School-Book Branch, Department of Education, lists the respective titles for each series and each grade.

ARITHMETIC

Point of View:

The authorized text books constitute the course materials to be covered. Teachers are advised that the organization and the order of concepts as presented in the texts are acceptable. They are also advised that a very definite teaching task remains to be done in presenting such material to their classes. **Simply assigning pages to be read and exercises to be done and corrected cannot be considered satisfactory arithmetic teaching.** Teachers must draw upon wider resources than those offered by any single text for the presentation of acceptable lessons. One textbook cannot be expected to make provision for all the individual differences that appear in a normal class. Some specific attention to lesson procedure and some supply of supplementary material and exercises will be necessary to meet the needs of exceptional students.

The attention of all teachers, and particularly of primary teachers, is directed to two principles that underlie all good arithmetic teaching:

1. **Meaning must be established before memorization be required.** The implications of such a principle should be readily apparent with respect to problems of arithmetic readiness, pupil motivation, lesson presentation, quantitative vocabulary, drill and practice. Many of the chronic difficulties of arithmetic learning in elementary schools have their origins in early arithmetical experiences that tend to emphasize wholesale memorization of abstract computations rather than meaningful understandings of the number system and of the fundamental processes.

2. **Quantitative understanding involves special reading skills and study skills.** The story interest that motivates the basic reading programme is largely absent in arithmetic context. Reflective thinking may be necessary after each sentence. The pupil must learn to ask and answer questions pertaining to problem solving. He must consult charts, graphs and diagrams for necessary information relative to the work at hand, and return readily to the spot of interruption. He must learn to collect or reject data, to manipulate facts for further information, to ponder upon the quantitative consequences of alternative choices of procedure. He must acquaint himself with a basic technical vocabulary. All these outcomes normally can not be attained through the regular reading programme. **Every elementary teacher must accordingly maintain a reading programme in arithmetic to match the progress of his class.**

GRADE I

Authorized for pupil purchase: **Jolly Numbers Primer,** Living Arithmetic Series.

Recommended for teachers' use: Teachers' Manual, Beginners' Course, Living Arithmetic Series. Buswell et al.

Teachers will find the manual an indispensable classroom aid. The content material for the entire grade is there subdivided into four periods and appropriate suggestions are made for use in developing the expanding concepts throughout each period. The manual contains many pages of illustrative arithmetic games, number activities,

charts, diagrams and other enrichment material. Lesson procedures at each level are clearly stated. The Grade I course for Alberta is intended to cover the work outlined on pages 1-65 of this manual.

Teacher attention is also directed to the brief notes and suggestions printed at the bottom of each page in the **Jolly Numbers** book itself.

The outline of content material is included in this programme of studies to acquaint teachers of other grades with the type of material and the extent of number concept developed in the first year of school. The minimum essentials of the Grade I year are summarized as follows:

1. Enumeration and counting by 1's to 20.
2. Some knowledge of the place of the separate numbers in the series to 10.
3. Oral use of the ordinals to **sixth** or **seventh.**
4. Recognition of groups of objects to 4 and of regular patterns of objects to 6 or 7.
5. Reading and writing the numerals to 10.
6. Intelligent control over the addition and subtraction combinations through 6.
7. Understanding and use of the process of addition and of subtraction.
8. Reading and writing the combinations horizontally and vertically.
9. Possession of a small reading vocabulary of number words and symbols.
10. Appreciation of the social value of arithmetic.

GRADE II

Authorized for pupil purchase: **Jolly Numbers,** Book One; **Jolly Numbers,** Book, Two, First Half.

Recommended for teachers' use: Teachers' Manual, Beginners' Course; Teachers' Manual, **Jolly Numbers,** Book Two.

Grade II teachers should note the comment on teachers' manuals made in the Grade I section.

The minimum essentials of the Grade II year are summarized as follows:

FIRST TERM (**Jolly Numbers,** Book One):

1. Enumeration and counting to 100 by 1's and to 100 by 10's.
2. Reading and writing numbers to 100.
3. Knowledge of the place of the numbers in the series to 100.
4. Use of ordinals to **eighth.**
5. Understanding of the significance of 10 as the basic unit in the second-decade numbers (and some appreciation of its significance in large numbers).
6. Intelligent control over the separate addition and subtraction combinations through 9.
7. Understanding of addition as the process of putting numbers together and of subtraction as the process of taking away a part (two ideas, "How many left" and "How many gone").
8. Understanding of the relationships between addition and subtraction and between the addition combinations and their corresponding subtraction combinations (direct and reverse).
9. Column addition to sums of 9, three addends, with and without 0.
10. Understanding of ½ as applied to single objects.

11. Simple reading vocabulary for number work.
12. Appreciation of the social values of arithmetic, a disposition to use the arithmetic already learned, and an eagerness to learn more.

SECOND TERM (**Jolly Numbers,** Book Two, First Half):

1. Increased understanding of the numbers to 100; ordinals to **"tenth".**
2. Counting by 2's to 20, by 5's to 100, and by 3's to 30.
3. Intelligent control over the addition and subtraction combinations through 11.
4. Increased understanding of the relationship between addition and subtraction as processes and as revealed in corresponding combinations.
5. Intelligent control over the 0-combinations.
6. Enriched understanding of the processes of addition and of subtraction, with extension of subtraction to cover the "difference" idea.
7. Column and horizontal addition to sums of 11, three digits.
8. Higher-decade addition and subtraction, sums and minuends to 19.
9. Use of ¼ and ⅓ to apply to single objects.
10. Use of numbers in money and in telling time.
11. Reading and writing Roman numerals to XII.
12. Increased reading vocabulary for number work.
13. Growing appreciation of the social values of arithmetic, together with increasing disposition to use arithmetic already learned and eagerness to learn more.

GRADE III

Authorized for pupil purchase: **Study Arithmetic,** Book 3, Studebaker et al.

Recommended for teachers' use: Guide Book to Study Arithmetic Book 3.

This review of the required new content as summarized from the arithmetic text constitutes the expected accomplishment for this grade. Review of material from previous grades is expected in every case.

Addition:

Remaining basic addition facts to 18.
Use of the plus sign.
One-column, two-column and three-column addition with and without carrying in one or more columns.
Checking addition.
Adding dollars and cents.

Subtraction:

Remaining basic facts, minuends exceeding 10.
Use of minus sign.
Subtracting two and three-figure numbers with single or double borrowing.
Checking subtraction.
Borrowing involving zero.
Subtracting dollars and cents.

Multiplication:

Multiplication concept and multiplication sign.

Basic multiplication facts with 1, 2 and 3.
Multiplication of two and three-figure numbers, carrying once.
Multiplication with zero.
Checking multiplication.

Division:

Division concept and division sign.
Basic division facts with 2 and 3.
One-figure quotient with remainder.
Two-figure quotient without remainder.
Dividing zero.

Interpreting Numbers:

Reading number words, one to one hundred.
Place value for hundreds, tens, and ones.
Reading and writing numbers to 999.
Meaning of zero.

Fractions:

Meaning of ½, ⅓, ¼ applied to a unit, or a collection.
Writing one-half, and one-third in figures.
Finding ½ and ⅓ of a number.

Money:

Reading and writing dollars and cents.
Adding and subtracting dollars and cents.
Counting money and making change.

Problem Solving:

Problems containing extra numbers.
Problems involving addition, subtraction, multiplication or division.
Problems without numbers.

Measurement:

Use of calendar and telling time to 5-minute intervals.
Inch, foot and yard; ounces and pounds; pints, quarts, gallons.
Identification of circle, triangle and square.

Quantitative Thinking:

Understand and apply measurement information.
Understand and apply computational processes.
Understand a problem situation.
Visualize spatial relationships.
Detect fallacies and absurdities.

GRADE IV

Authorized for pupil purchase: **Study Arithmetics,** Book 4, Studebaker et al.

Recommended for teachers' use: Guidebook to Study Arithmetics, Book 4.

This review of the required new content as summarized from the authorized text constitutes the expected accomplishment for this grade. Review of material from previous grades is expected in every case.

Addition

Review and practice.

Subtraction.

Subtraction involving zeroes in minuend.

Multiplication:

Basic multiplication facts with 4, 5, 6, 7, 8, 9 and 10.
Multiplication involving carrying twice.
Zero in multiplication.
Multiplication with 2-digit multiplier.
Multiplication with money.

Division:

Basic division facts with 4, 5, 6, 7, 8, 9.
Division with 1-digit divisor, 3-digit quotient and remainder.
Zeroes in quotient.
Division with money.
Checking division.

Interpreting Numbers:

Zero and place value.
Reading and writing numbers to 99,999.
Roman numerals to 30.

Money:

Multiplication and division with money.

Problem Solving:

Using information from previous problems.
Problems involving two steps.
Problems involving two answers.

Measurement:

Telling and writing time to 1-minute intervals.
Liquid and dry measures (pints, quarts, gallons; quarts, pecks, bushels).
Reading a thermometer.
Linear measure (inch, foot, yard, mile).
Weight measure (ounces, pound, ton).

Fractions:

Meaning of unit and non-unit fractions.
Equal fractions.
The ruler and fractions.

Quantitative Thinking:

Continued practice and expanding concepts in areas previously outlined.

GRADE V

Authorized for pupil purchase: **Study Arithmetics,** Book 5, Studebaker et al.

Recommended for teachers' use: Guidebook to Study Arithmetics, Book 5.

This review of the required new content as summarized from the authorized text constitutes the expected accomplishment for this grade. Review of material from previous grades is expected in every case.

Addition and Subtraction:

Review and practice.

Multiplication:

Multiplication with 3-digit multipliers.
Zeroes in multiplication.
Checking multiplication.

Division:

Using 2-digit divisors.
Final zero in quotient.
Rule of 9.
Remainders in fractional form.

Interpreting Numbers:

6, 7, 8, and 9-digit numbers.
Roman numerals to 100.

Money:

Accounts and savings.
Prices based on units of more than one.

Problem Solving:

Equal shares and averages.
Problems using tabular data.
Three-step problems.

Measurement:

Perimeter concept.
Time zones.
Time measure (seconds, minutes, hours, 24-hour system).

Fractions:

Comparison of fractions.
Changing fractions.
Fractions as indicated division.
Reading fractions with large denominators.

Addition of Fractions

Adding fractions with common denominators.
Adding proper fractions, mixed number and whole numbers.

Subtraction of Fractions:

Subtracting fractions with common denominators.
Subtracting proper fraction, mixed number and whole number (no borrowing).

Quantitative Thinking:

Continued practice and expanding concepts in areas previously outlined.

GRADE VI

Authorized for pupil purchase: **Study Arithmetics,** Book 6, Studebaker et al.

Recommended for teachers' use: Guidebook to Study Arithmetics, Book 6.

This review of the required new content as summarized from the authorized text constitutes the expected accomplishment for this grade. Review of material from previous grades is expected in every case.

Addition, Subtraction, Multiplication:

Review and practice.

Division:

Division with 3-digit divisor.

Fractions:

Comparison of numbers as fractions.

Addition and Subtraction of Fractions:

Adding two or three more difficult fractions.
Subtracting proper fraction and mixed numbers with borrowing.

Multiplication of Fractions:

Multiplication of fractions concept.
Multiplication of proper fractions, mixed numbers and whole numbers, with and without cancellations.

Division of Fractions:

Division of fractions concept.
Division of proper fractions, mixed numbers and whole numbers.

Decimal Fractions:

Decimal fraction concept including tenths, hundredths, thousandths, and ten-thousandths.

Multiplication of Decimal Fractions:

Multiplication of decimal by whole number, whole number by decimal, decimal by decimal.
Multiplication of decimal by 10, 100, and 1000.
Multiplication by .1, .01, and .001.

Division of Decimal Fractions:

Division of decimal by whole number, decimal by decimal, and whole number by decimal.
Changing remainders to decimals.
Dividing by 10, 100 and 1000; by .1, .01, .001.

Interpreting Numbers:

Roman numerals.
Reading and writing billions.

Measurement:

Square measure.
Yards and meters.
Adding, subtracting, multiplying and dividing compound measures.
Rods and acres.

Areas and Square Measure:

Lines and angles.
Dimensions, perimeters and areas of rectangles.

Scale Drawings and Graphs:

Reading and using scale drawings.
Reading and interpreting bar graphs and line graphs.

Accounts.

Cash accounts.
Savings accounts.

Problem Solving:

Problems using fractions and decimals.
Using diagrams to aid in problem solving.

Quantitative Thinking:

Continued practice and expanding concepts in areas previously outlined.

MUSIC

Point of View:

Music is the most universally practised medium of emotional expression. Appreciation, understanding and participation in music can make important contributions to personality development. Not only must the normal urge for rhythmic expression be recognized as universal, but the prevalence of music in modern culture must be accepted. The child hears music hours on end from the radio and the screen. He hears music at the rink, at the ball game, at the circus, at concerts, in church, in restaurants and on street corners. Somewhere in his process of education he must learn something about the fundamentals of musical composition, performance and appreciation, not only to widen his own range of personal expression but to exercise some degree of distinction respecting the musical barrage that has become a part of his daily experience.

The chief aim, then, of music instruction in our elementary schools appears to be twofold. The first is to develop a reasonable amount of skill and a sense of discrimination and choice to permit acceptable participation in some type of musical experience. The second is to foster those appreciations, interests, and tastes that will serve as sound criteria in the selection of music for listening pleasure that can enrich the cultural life of the child in his early years at school and his later years as a mature adult. The development of music skill is probably the easier task. Under the guidance of a teacher, either at school or in private practice, children with normal native ability can be taught to perform reasonably well with voice or instrument and to recognize the various symbols of music reading. Appreciations and tastes are much less tangible and are much more influenced by factors beyond the realm of the school. They are, however, just as important as the skills for the simple reason that most people listen to music much more than they play or sing.

Occasionally schools have, in the name of musical appreciation, imposed a dubious wholesale ban on popular music in the classroom. Children cannot avoid hearing this music in their daily experiences and there are many reasons why such music is acceptable and even attractive to them. It has already been intimated that personal enjoyment is a worthy goal for music education. A careful selection of songs from the popular tunes can add measurably to the pupil's enjoyment of classroom singing and will, as well, offer some opportunity to improve the child's discrimination respecting popular music.

The social significance of music must not be overlooked. It is, in fact, in this relationship that music will be most completely integrated with the Enterprise. Music as an influence in the home, the school and the community should be reflected in units of work at appropriate levels. The story of social development in our own country and in other lands is told, in part, by traditional folk music rooted in the soil. Each culture, indeed many social-occupational sections within larger cultures, have developed musical expression that is distinctive and appealing. Cultures in lands across the sea can be more fully understood through their music. "Music experiences serve to enrich and vitalize the unit of work in which children may be currently engaged. For example, a feeling for the manners, customs, tempo of living, hopes and dreams of a people may be aroused by listening to their

folk music, examining their musical instruments, singing their songs, and learning their representative folk dances. When children become acquainted with music, their imagination is aroused. They may be stimulated to creative expression through original tunes and dances, pantomimes and dramatizations."[1]

The authorized music texts for the elementary schools are **The Canadian Singer Series, Books I-V.** These five books are compiled to include work suitable for the first six grades. Book I is intended for teacher use only, while the other books are authorized for pupil purchase. No specific allocation of text has been made for separate grades. Each classroom should select for its use the book that most nearly meets the level of accomplishment and interest of the pupils. Generally speaking, fully graded schools will find Books I-II useful in the first three grades and Books III-IV-V useful in Grades IV-V-VI respectively. In rural schools and partially graded rooms the teacher, principal and superintendent in consultation should select from the series the most promising book for pupil benefit and progress during the current year. The guidebooks to accompany Books II-V are recommended for regular teacher use.

These guide books contain much material which will be of value in the direction of an appreciation programme appropriate to the maturity level of the children. Developing love for and understanding of music can never be an isolated special phase of the music training. It should be rather the culmination of all that the child does in music. Unfortunately, the appreciation programme has frequently devolved into a mere listening to reproducing devices. The pupil can gain in appreciation through his own expression and performance, his reading and studying, as well as through listening experiences. Feeling for mood through singing rhythmic and melodic songs, familiarity with music of the masters through listening to radio, phonograph and the performance of others, the analysis of the song itself, will gradually build up to the more advanced work in the study of the lives of great musicians and their art forms. Appreciation then becomes the background of every music lesson and fundamental to all music discrimination and selection.

The following pages summarize the information and material contained in each successive authorized text. Black face type represents new material, and light face type represents review material.

1—Music in The Elementary School—Board of Education of the City of New York, 1945-46.

RHYTHM AND METER

Fundamental rhythm as expressed by walk, run, skip, hop, swing, stretch, bend, jump, turn, gallop, slide, sway.

Time variations as expressed through meaningful terms: slow, fast, rest, hold.

Response through feeling in verbal chants and the use of percussion accompaniments.

Variation in movement and intensity recognized by sound and by bodily response.

Distinctions in meters felt and interpreted through clapping, stepping, beating, etc.

Free rhythmic response.

Songs, games, and dances.

MELODY

Correct use of the singing voice in individual or group effort.

Development of accuracy in imitation and response.

Establishment of feeling for the melodic line.

Ear training in hearing melodies sung or played by others.

Memorization of melodies.

HARMONY

Harmonic background in accompaniments.

CREATIVE ACTIVITY

Self-expression: encouragement of originality in rhythmic activity.

Varied bodily response in basic rhythm.

Invention of melody in songs, stories, games, and dances.

INSTRUMENTAL RELATIONSHIP

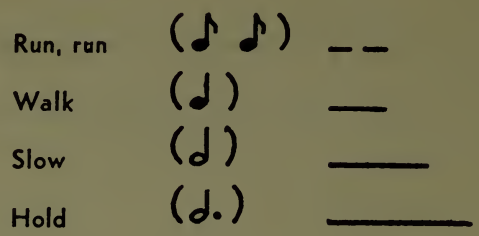
Use of rhythmic instruments (percussion and melodic).

Accompanying song, dance, and rhythmic expression.

Development of motor co-ordination through rhythmic playing.

RHYTHM AND METER

Rhythmic understanding through bodily response.
Rhythmic and metrical variety in rote songs.
Recognition of rhythms by sound.
Notes of varying length associated with meaningful symbols:



Rhythm chants in exercises and songs.
Free rhythmic response.
Singing games and dances.

MELODY

Continued rote-song experience.
Correct use of the singing voice.
Metrical and key variety in songs.
Feeling for mood.
Recognition of fundamental tonal patterns.
Use of key-chord and scale-line patterns in rote-note and note songs.
Sol-mi, mi-do, sol-mi-do, sol-la-ti-do, sol-fa-mi-re-do.
Tonal pattern employed in ascending and descending series.
Hearing, singing, building of tonal patterns in several keys.

HARMONY

Harmonic background in accompaniments.

CREATIVE ACTIVITY

Free rhythmic and melodic expression.
Dramatization of songs and stories.
Original melodies and texts.

INSTRUMENTAL RELATIONSHIP

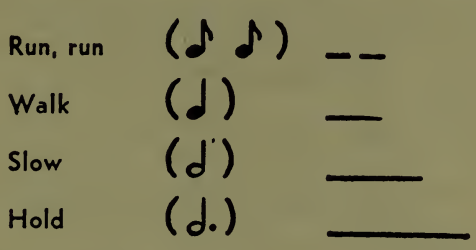
Use of rhythmic instruments (percussion and melodic).
Accompanying song, dance, and rhythmic expression.
Development of motor co-ordination through rhythmic playing.

RHYTHM AND METER

Rhythmic understanding through bodily response.
Development of metric feeling.
Interpretation of metric design through bodily response in

$$\begin{matrix} 2 & 3 & 4 & 6 \\ 4 & 4 & 4 & 8 \end{matrix}$$

Application of meters in rote and note songs, games, and dances.
Notes of varying length associated with meaningful symbols:



Free rhythmic response.
Singing games and dances.

MELODY

Continued rote-song experience.
Correct use of the singing voice.
Variety of key, meter, and mood.
Key-chord and scalewise tonal patterns.
Thirds outside the key chord, ascending and descending.
Re-fa, fa-la, sol-ti, la-do, ti-re.
Hearing, singing, building of tonal patterns in several keys.

HARMONY

Harmonic background in accompaniments.

CREATIVE ACTIVITY

Free rhythmic and melodic expression.
Extension of original song making.
Construction of melody instruments.

INSTRUMENTAL RELATIONSHIP

Introduction to orchestral instruments, ancient and modern.
The melody orchestra: marimba, psalter, harmonica, flute, triangle, etc.

RHYTHM AND METER

Rhythmic understanding through bodily response.

Translation of metrical values into mathematical concepts:

Run	♪	Eighth note
Walk	♩	Quarter note
Slow	𝅗𝅥	Half note
Hold	𝅗𝅥. 𝅝	Dotted half note; whole note

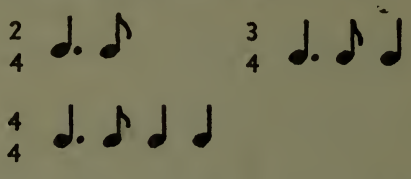
Names for rests:

Eighth Quarter Half Whole

Metric distribution and underlying beat in

$\frac{2}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ **metres**

Melodies starting on 1st, 2nd, 3rd, and 4th beat of the measure.
Dotted quarter followed by the eighth note:



Games and dances characteristic of many people, sailor chanteys, ballads.

MELODY

Continued rote-song experience.
Correct use of the singing voice.
Variety of key, meter, and mood.
(See Rules for Locating DO on page 88, Book 4).
Extension of tonal patterns to include fourths, fifths, sixths and octaves.
Chromatic alterations: sol-fi-sol, mi-ri-mi, re-di-re.
Minor tonality in note songs.
Rounds and descants as rote experience.
Chord patterns outside the key chord: do-mi-sol, re-fa-la, fa-la-do in ascending and descending patterns.

HARMONY

Harmonic background in accompaniments.
Rounds and descants as rote experience.

CREATIVE ACTIVITY

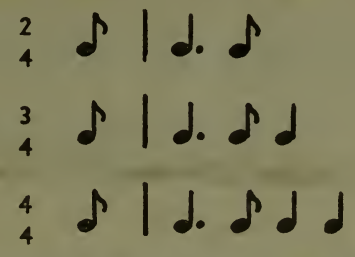
Free rhythmic and melodic expression.
Original melodies and texts.

INSTRUMENTAL RELATIONSHIP

Introduction of modern band and orchestral instruments: violin, cello, flute, clarinet, cornet, trombone, and drums.

RHYTHM AND METER

Rhythmic understanding through bodily response.
Review of running, walking, and fundamental time concepts.
Dotted quarter and eighth notes starting on and off the beat:



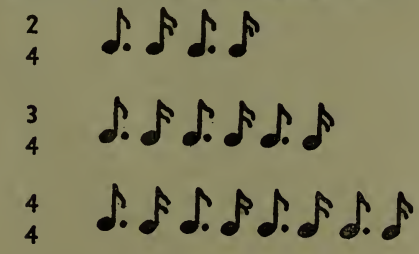
Six-eight meter sensed, analyzed and translated into symbols:

Running

Skipping

Walking

Dotted eighth and sixteenth notes:



MELODY

Continued rote-song experience.
Further extension of interval study.
Uses of the voice in part singing: rounds, canons, descants, and two-part songs in major and minor keys.
Reading melodically with words at sight.

HARMONY

Harmonic background in accompaniments.
Rounds, dances, descants, and two-part songs as note experience.
Band and orchestral accompaniments.

CREATIVE ACTIVITY

Free rhythmic and melodic expression.
Making of simple orchestrations.

INSTRUMENTAL RELATIONSHIP

Further development of band and orchestra.
Simple orchestration.

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